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# **San Bernardino County Live Births 1990-2000**



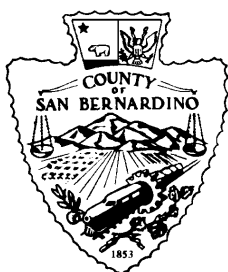
**San Bernardino County  
Department of Public Health  
August 2002**

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# **San Bernardino County Live Births 1990-2000**

*Live birth outcomes and characteristics, including progress toward  
achieving Healthy People 2000 Objectives*



Prepared by:  
County of San Bernardino County  
Human Services System  
Department of Public Health  
August, 2002

## **ACKNOWLEDGMENTS**

This report was prepared by Evelyn Trevino of the Program Analysis and Statistics Section of the San Bernardino County Department of Public Health. Others contributing to this report include Thomas J. Prendergast, Jr., M.D., MPH, Director of Public Health; and Terri Carlson, MSPH, Program Analysis and Statistics Program Manager.

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## TABLE OF CONTENTS

Introduction .....	7
Live Births and Birth Rates .....	9
Live Births and Birth Rates: Teen Mothers .....	13
Low Birthweight Live Births .....	19
Very Low Birthweight Live Births .....	24
First Trimester Prenatal Care .....	28
Pay Source for Prenatal Care .....	34
Method of Delivery .....	35
Mother's Place of Birth .....	36
Mother's Education .....	37
Mother's Marital Status .....	38
Fetal Deaths .....	39
Infant Mortality .....	41
Appendix A. Glossary of Terms .....	55
Appendix B. Rates and Ratios .....	56
Appendix C. San Bernardino County Resident Live Births by Mother's Race/Ethnicity, 1990-2000 .....	57
Appendix D. San Bernardino County Resident Live Births by Selected Characteristics and ZIP Code, 1998-2000 .....	59

## LIST OF TABLES

1. Live Births, Crude Birth Rates, and General Fertility Rates, California and San Bernardino County Residents, 1990-2000 .....	10
2. Live Birth Rates for Mothers 15-17 and 15-19 Years of Age, California and San Bernardino County Residents, 1990-2000 .....	14
3. Number and Percent of Low Birthweight Live Births by Race/Ethnicity of Mother, California and San Bernardino County Residents, 1990-2000.....	21
4. Number and Percent of Very Low Birthweight Live Births by Race/Ethnicity of Mother, California and San Bernardino County Residents, 1990-2000 .....	26
5. Number and Percent of Live Births to Mothers Receiving First Trimester Prenatal Care, California and San Bernardino County Residents, 1990-2000 .....	32
6. Live Births by Pay Source for Prenatal Care, California and San Bernardino County Residents, 1990-2000.....	33
7. Live Births by Method of Delivery, California and San Bernardino County Residents, 1990-2000 .....	34
8. Live Births by Mother's Place of Birth, California and San Bernardino County Residents, 1990-2000 .....	35
9. Live Births by Mother's Education, California and San Bernardino County Residents, 1990-2000 .....	36
10. Live Births by Mother's Marital Status, California and San Bernardino County Residents, 1990-2000 .....	37
11. Fetal Deaths and Fetal Death Rates, California and San Bernardino County Residents, 1990-2000 .....	39
12. Infant Deaths and Infant Mortality Rates by Race/Ethnicity of Mother, California and San Bernardino County Residents, 1990-1999 .....	44
13. Neonatal Deaths and Neonatal Mortality Rates by Race/Ethnicity of Mother, California and San Bernardino County Residents, 1990-2000 .....	48
14. Fetal Deaths, Neonatal Infant Deaths, and Neonatal to Fetal Death Ratio, San Bernardino County and Remainder of California, 1989-1999 .....	50
15. Postneonatal Deaths and Postneonatal Mortality Rates by Race/Ethnicity of Mother, California and San Bernardino County Residents, 1990-2000.....	53

## LIST OF FIGURES

1. Live Births and General Fertility Rates, San Bernardino County Residents, 1990-2000 .....	9
2. Birth Rates by Race, San Bernardino County Residents, 1990-2000 .....	11
3. Live Births by Mother's Race/Ethnicity, San Bernardino County Residents, 1990-2000 .....	12
4. Live Births and Birth Rates: Mothers 15-19 Years, San Bernardino County Residents, 1990-2000 .....	13
5. Birth Rates for Mothers Aged 15-19 Years by ZIP Code, San Bernardino County Residents, 2000 .....	15
6. Live Births and Birth Rates: Mothers 15-17 Years, San Bernardino County Residents, 1990-2000 .....	16
7. Birth Rates by Race: Mothers Aged 15-19 Years, San Bernardino County Residents, 1990-2000 .....	17
8. Live Births by Race: Mothers Aged 15-19 Years, San Bernardino County Residents, 1990-2000 .....	18
9. Percent Low Birthweight Live Births, California and San Bernardino County Residents, 1990-2000 .....	19
10. Percent Low Birthweight Live Births to Black Mothers, California and San Bernardino County Residents, 1990-2000 .....	20
11. Percent Low Birthweight Live Births to Hispanic Mothers, California and San Bernardino County Residents, 1990-2000 .....	22
12. Percent Low Birthweight Live Births to White Mothers, California and San Bernardino County Residents, 1990-2000 .....	22
13. Percent Low Birthweight Births by ZIP Code, San Bernardino County Residents, 2000 .....	23
14. Percent Very Low Birthweight Live Births, California and San Bernardino County Residents, 1990-2000 .....	24
15. Percent Very Low Birthweight Live Births to Black Mothers, California and San Bernardino County Residents, 1990-2000 .....	25
16. Percent Very Low Birthweight Live Births to Hispanic Mothers, California and San Bernardino County Residents, 1990-2000 .....	27
17. Percent Very Low Birthweight Live Births to White Mothers, California and San Bernardino County Residents, 1990-2000 .....	27
18. Percent of Live Births to Mothers Receiving First Trimester Prenatal Care, California and San Bernardino County Residents, 1990-2000 .....	28
19. Percent First Trimester Prenatal Care by ZIP Code, San Bernardino County Residents, 2000 .....	29
20. Percent of Live Births to Black Mothers Receiving First Trimester Prenatal Care, California and San Bernardino County Residents, 1990-2000 .....	30
21. Percent of Live Births to Hispanic Mothers Receiving First Trimester Prenatal Care, California and San Bernardino County Residents, 1990-2000 .....	31
22. Percent of Live Births to White Mothers Receiving First Trimester Prenatal Care, California and San Bernardino County Residents, 1990-2000 .....	31
23. Fetal Death Rates, California and San Bernardino County Residents, 1990-2000 .....	38
24. Infant Mortality Rates, California and San Bernardino County Resident Birth Cohorts, 1990-1999 .....	41

25. Infant Mortality Rate by ZIP Code, San Bernardino County Residents, 1996-1999 .....	42
26. Black Infant Mortality Rates, California and San Bernardino County Resident Birth Cohorts, 1990-1999.....	43
27. Hispanic Infant Mortality Rates, California and San Bernardino County Resident Birth Cohorts, 1990-1999.....	45
28. White Infant Mortality Rates, California and San Bernardino County Resident Birth Cohorts, 1990-1999.....	45
29. Neonatal Mortality Rates, California and San Bernardino County Resident Birth Cohorts, 1990-1999 .....	46
30. Black Neonatal Mortality Rates, California and San Bernardino County Resident Birth Cohorts, 1990-1999.....	47
31. Hispanic Neonatal Mortality Rates, California and San Bernardino County Resident Birth Cohorts, 1990-1999.....	49
32. White Neonatal Mortality Rates, California and San Bernardino County Resident Birth Cohorts, 1990-1999.....	49
33. Postneonatal Mortality Rates, California and San Bernardino County Resident Birth Cohorts, 1990-1999.....	51
34. Black Postneonatal Mortality Rates, California and San Bernardino County Resident Birth Cohorts, 1990-1999 .....	52
35. Hispanic Postneonatal Mortality Rates, California and San Bernardino County Resident Birth Cohorts, 1990-1999 .....	54
36. White Postneonatal Mortality Rates, California and San Bernardino County Resident Birth Cohorts, 1990-1999 .....	54

## INTRODUCTION

The purpose of this report is to describe San Bernardino County resident births and birth outcomes from 1990 to 2000, including progress toward meeting Healthy People 2000 Objectives. The birth characteristics and outcomes examined, including comparisons by mother's race/ethnicity and to California residents for many measures, are:

- Number of births and birth rates
- Births to teen mothers
- Low birthweight and very low birthweight
- Prenatal care onset
- Pay source for prenatal care
- Method of delivery
- Mother's birthplace
- Mother's education
- Mother's marital status
- Fetal mortality
- Infant mortality
- Neonatal infant mortality
- Postneonatal infant mortality
- Neonatal to fetal death ratio.

In July 1991 the United States Centers for Disease Control and Prevention released a set of eighteen health status indicators, and encouraged their use by federal, state, and local health agencies<sup>1</sup>. It presented a national prevention strategy for significantly improving the health of the American people, and identified three broad goals and 319 objectives which became known as the Healthy People 2000 (HP 2000) objectives. The objectives addressed in this report are:

- *Reduce the infant mortality rate to no more than 7 per 1,000 live births.*
- *Reduce the infant mortality rate among blacks to no more than 11 per 1,000 live births.*
- *Reduce the neonatal mortality rate to no more than 4.5 per 1,000 live births.*
- *Reduce the neonatal mortality rate among blacks to no more than 7 per 1,000 live births.*
- *Reduce the postneonatal mortality rate to no more than 2.5 per 1,000 live births.*
- *Reduce the postneonatal mortality rate among blacks to no more than 4 per 1,000 live births.*
- *Reduce the fetal death rate (20 or more weeks gestation) to no more than 5 per 1,000 live births plus fetal deaths.*
- *Reduce low birthweight to an incidence of no more than 5 percent of live births and very low birthweight to no more than 1 percent of live births.*
- *Reduce low birthweight among blacks to an incidence of no more than 9 percent and very low birthweight among blacks to no more than 2 percent.*
- *Increase to at least 90 percent the proportion of all pregnant women who receive prenatal care in the first trimester of pregnancy.*
- *Increase to at least 90 percent the proportion of all black and Hispanic pregnant women who receive prenatal care in the first trimester of pregnancy.*

Of the above objectives five had been met in San Bernardino County by the year 2000; each was achieved in the specific year(s) indicated:

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<sup>1</sup> U.S. Department of Health and Human Services, *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*, Public Health Service, Washington, D.C., 1991.



- Fetal death rate (1999)
- Black infant mortality rate (1996)
- Black neonatal infant mortality rate (1996)
- Postneonatal infant mortality rate (1999)
- Black postneonatal infant mortality rate (1995, 1996)

Several data sources were used to derive the measures shown in this report. Most of the information was obtained from 1990 through 2000 birth public use files produced by the State of California Department of Health Services (CA DHS). Birth rates were calculated using population estimates from the California Department of Finance, *Race/Ethnic Population Estimates with Age and Sex Detail, 1970-2040*, December 1998. Fetal death statistics were compiled from the CA DHS fetal death files. Infant mortality statistics were extracted from the CA DHS birth cohort files. These files consist of linked birth and death records, and are available approximately three years after the year of birth; hence the infant mortality statistics in this report are for the years 1990 through 1999. However, infant mortality figures are not shown for 1998, as CA DHS did not produce the birth cohort file for that year. It is important to note that the CA DHS updates the cohort files as new information is obtained. Consequently, figures shown in this report that were derived from the cohort files may differ slightly from figures produced from other CA DHS data sources.

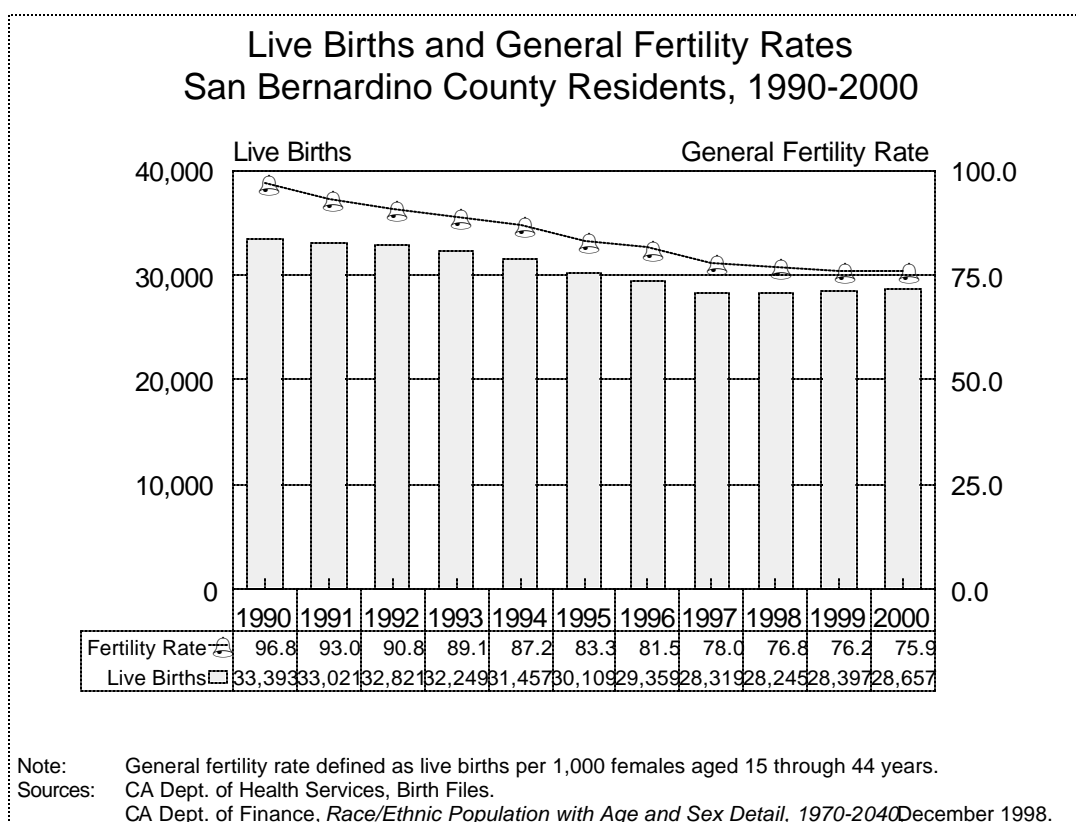
Race/ethnicity references throughout this report refer to the race/ethnicity of the mother on the birth record. Ninety-four percent of San Bernardino County's live births for the review period are from the three mutually exclusive groups: black, non-Hispanic; Hispanic; and white, non-Hispanic; therefore, other race groups are analyzed to a lesser degree due to the small numbers of events. Throughout this report these three groups are referred to as black, Hispanic and white, respectively.

Beginning in 2000, the California certificate of live birth was modified to allow reporting of up to three races for the mother. Therefore, reported race/ethnicity for the year 2000 is somewhat changed from prior years. For year 2000 birth counts and rates in this report, mother's race is reported using a "generated" race field. Generated race is defined as the first race listed on the birth certificate, unless Hawaiian is listed second or third, in which case the generated race is Hawaiian. Generated race currently is being reported by both CA DHS and the National Center for Health Statistics, since its single race categories correspond to available population denominators.

The counts and rates in this report were compiled and calculated by the San Bernardino County Department of Public Health, Program Analysis and Statistics Section.

# LIVE BIRTHS AND BIRTH RATES

After the continuous increase in births and rates throughout the 1980's, the 1990's saw decreasing live births and fertility rates, as shown in Figure 1. The largest number of live births to San Bernardino County residents during the review period was in 1990, with 33,393 births. The corresponding general fertility rate, defined as live births per 1,000 women 15 through 44 years of age, was 96.8. By 2000 the general fertility rate had fallen 22 percent to 75.9, although the number of births began increasing in 1999, ending a decade long trend of decreasing births.



**Figure 1**

Table 1 compares the crude birth rate, defined as live births per 1,000 population, and general fertility rate for San Bernardino County and California residents over the review period. Both the crude birth rate and the general fertility rate in San Bernardino County were higher than the rates for California every year from 1990 to 2000. In 2000, San Bernardino County's general fertility rate was about six percent higher than California's.

**Table 1**  
Live Births, Crude Birth Rates, and General Fertility Rates  
California and San Bernardino County Residents, 1990-2000

Year	California			San Bernardino County		
	Live Births	Crude Birth Rate	General Fertility Rate	Live Births	Crude Birth Rate	General Fertility Rate
1990	611,666	20.4	84.7	33,393	23.2	96.8
1991	609,228	19.9	83.5	33,021	22.2	93.0
1992	600,838	19.3	82.0	32,821	21.4	90.8
1993	584,483	18.5	80.1	32,249	20.8	89.1
1994	567,034	17.8	78.1	31,457	20.1	87.2
1995	551,226	17.2	76.3	30,109	19.0	83.3
1996	538,628	16.6	74.7	29,359	18.4	81.5
1997	524,174	15.9	72.2	28,319	17.5	78.0
1998	521,265	15.6	71.4	28,245	17.1	76.8
1999	518,073	15.2	70.5	28,397	16.8	76.2
2000	531,285	15.3	71.9	28,657	16.6	75.9

Notes: General fertility rate defined as live births per 1,000 female population aged 15-44 years.  
Crude birth rate defined as live births per 1,000 population.

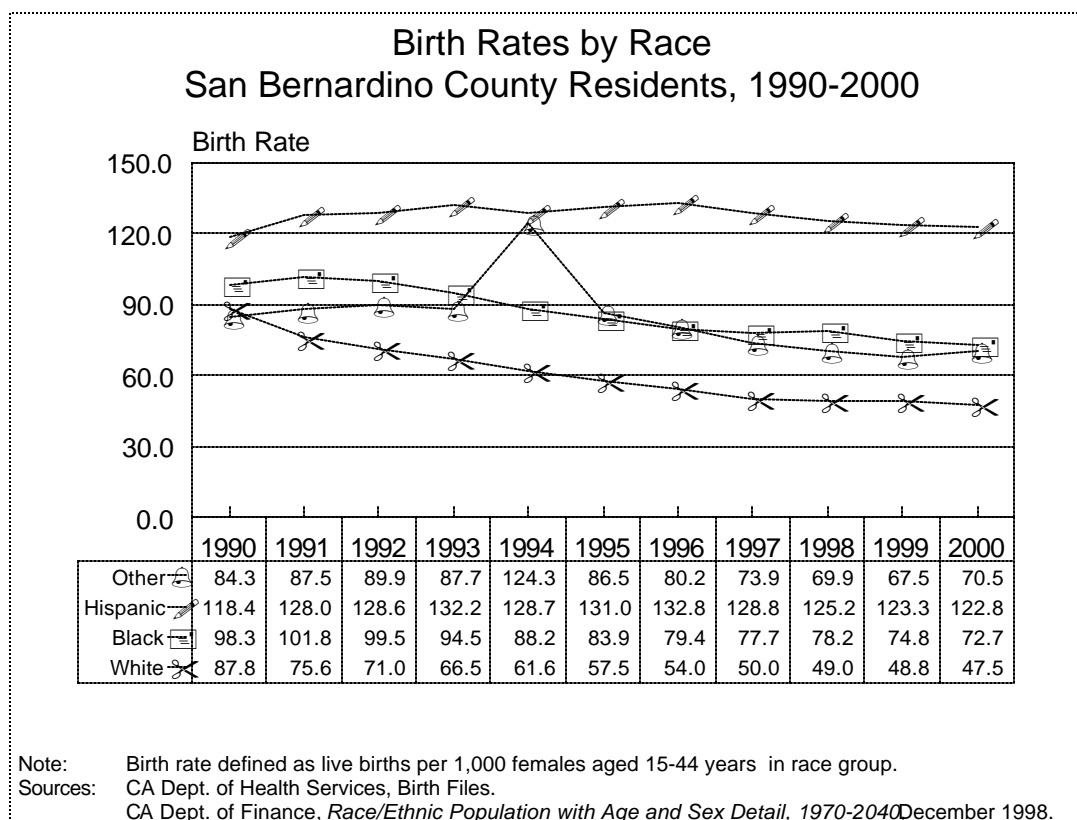
Sources: California Department of Health Services, Birth Files.  
California Department of Finance, *Race/Ethnic Population with Age and Sex Detail, 1970-2040*, December 1998.

## Live Births and Birth Rates by Race/Ethnicity of Mother

Figure 2 shows that in San Bernardino County the highest birth rates were among women of Hispanic origin, whose birth rate remained the most stable over the review period. Birth rates for white and black mothers showed a declining trend over the decade, with the white rate falling 46 percent and the black rate falling 26 percent. In 2000, the birth rate for Hispanics was almost 2.6 times higher than for whites, and about 1.7 times higher than for blacks.

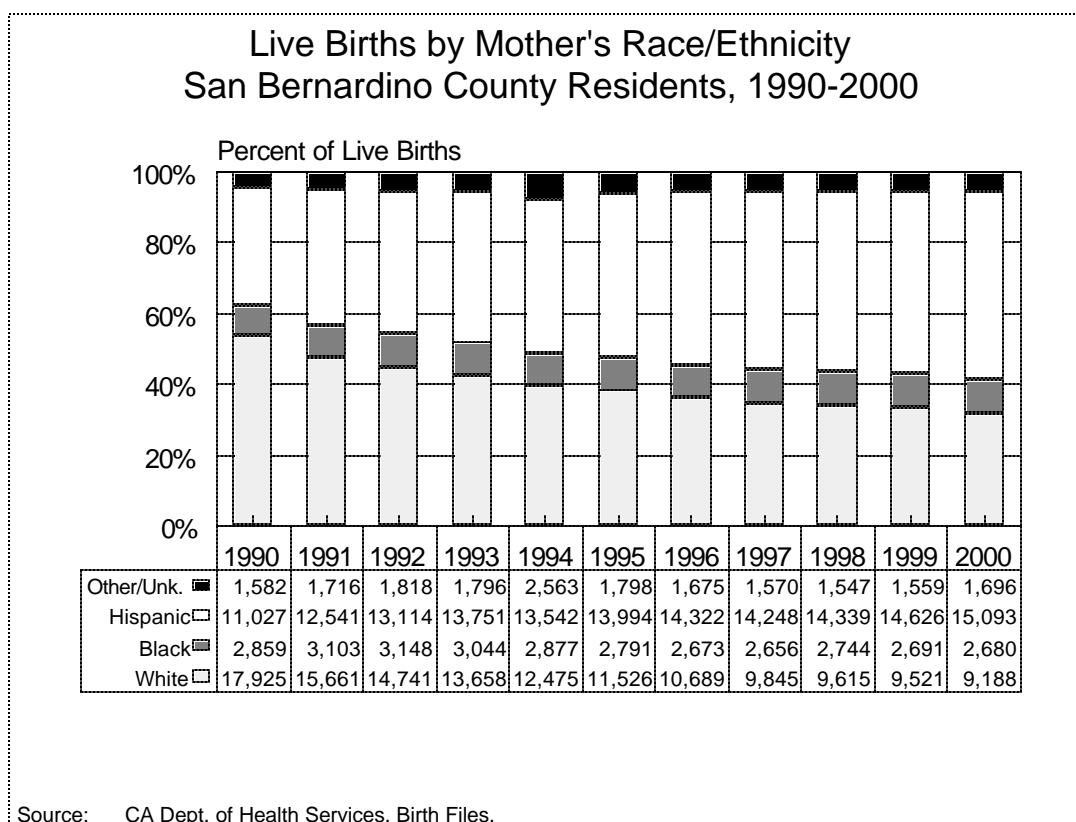
The apparent increase in the birth rate for mothers of “other” race/ethnicity during the single year 1994 is an artifact of reporting practices during that year. The State’s Automated Vital Statistics System (AVSS) was implemented in San Bernardino County in 1994. The CA DHS document *Evaluation of Race/Ethnic Coding Data in the Birth Information Database* reported several anomalies in San Bernardino County’s birth race/ethnicity reporting and coding practices in 1994 that were subsequently corrected.

San Bernardino County resident live births by detailed race/ethnicity categories from 1990-2000 are tabulated in Appendix C.



**Figure 2**

Dramatic changes in the proportion of births in each race/ethnic group occurred during the 1990's in San Bernardino County, as portrayed in Figure 3. From 1990 to 2000, births to white mothers changed from 54 percent of all births to 32 percent. During the same period, births to Hispanic mothers grew from 33 percent of all births to 53 percent. The proportion of births to black mothers was relatively constant, between 9 and 10 percent, throughout the decade.

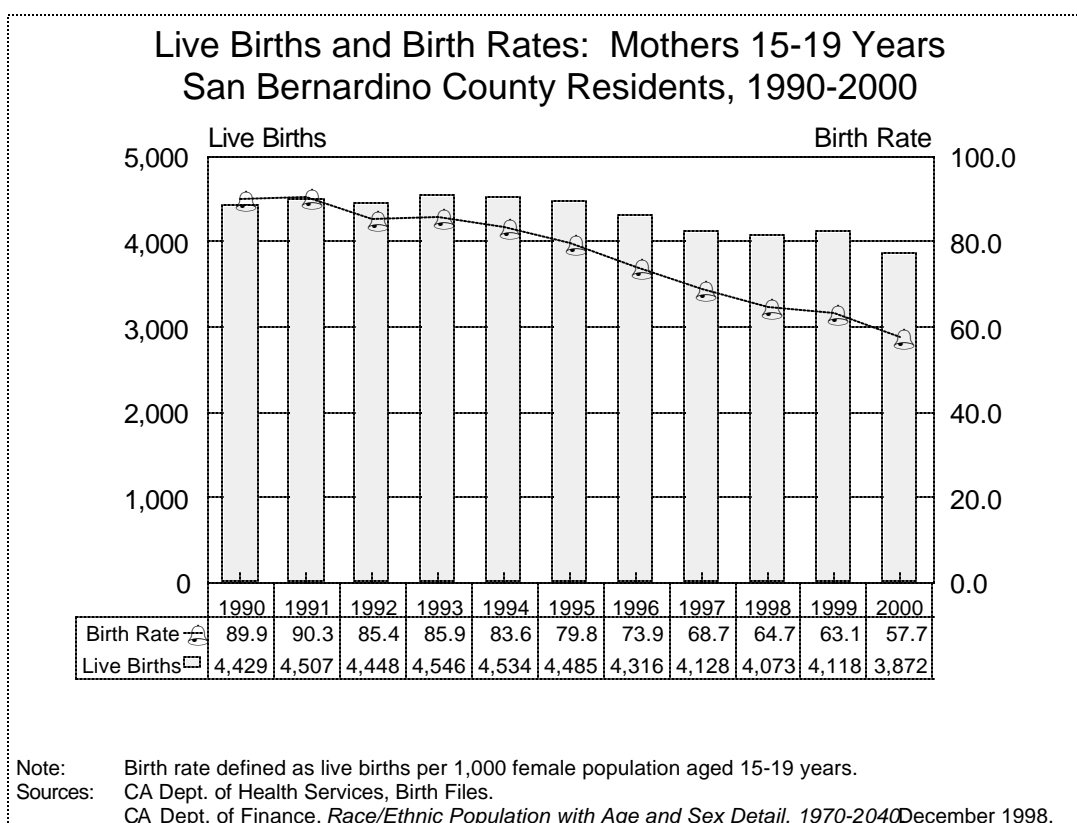


**Figure 3**

# **LIVE BIRTHS AND BIRTH RATES: TEEN MOTHERS**

Mirroring state and national trends, the live birth rate among San Bernardino County resident mothers fifteen through nineteen years of age has been decreasing since 1991. The 2000 rate of 57.7 live births per 1,000 female population 15 through 19 years is 36% lower than the rate in 1991. However, the rate among San Bernardino County residents still is 20% higher than for California, which had a rate of 48.1 in 2000.

Birth rates for teen mothers residing in San Bernardino County and California are compared in Table 2. Rates for mothers ages 15-17 years and 15-19 years are shown for 1990 through 2000. For both age groups, the rate for San Bernardino County residents was higher than the rate for California residents every year of the review period. However, the percent decrease in the birth rate from 1990 to 2000 was larger for San Bernardino County than for California in both age groups of mothers. San Bernardino County's birth rate for 15-19 year old mothers decreased 36%, compared to 31% for California; and San Bernardino County's birth rate for 15-17 year old mothers decreased 40%, compared to 33% for California.



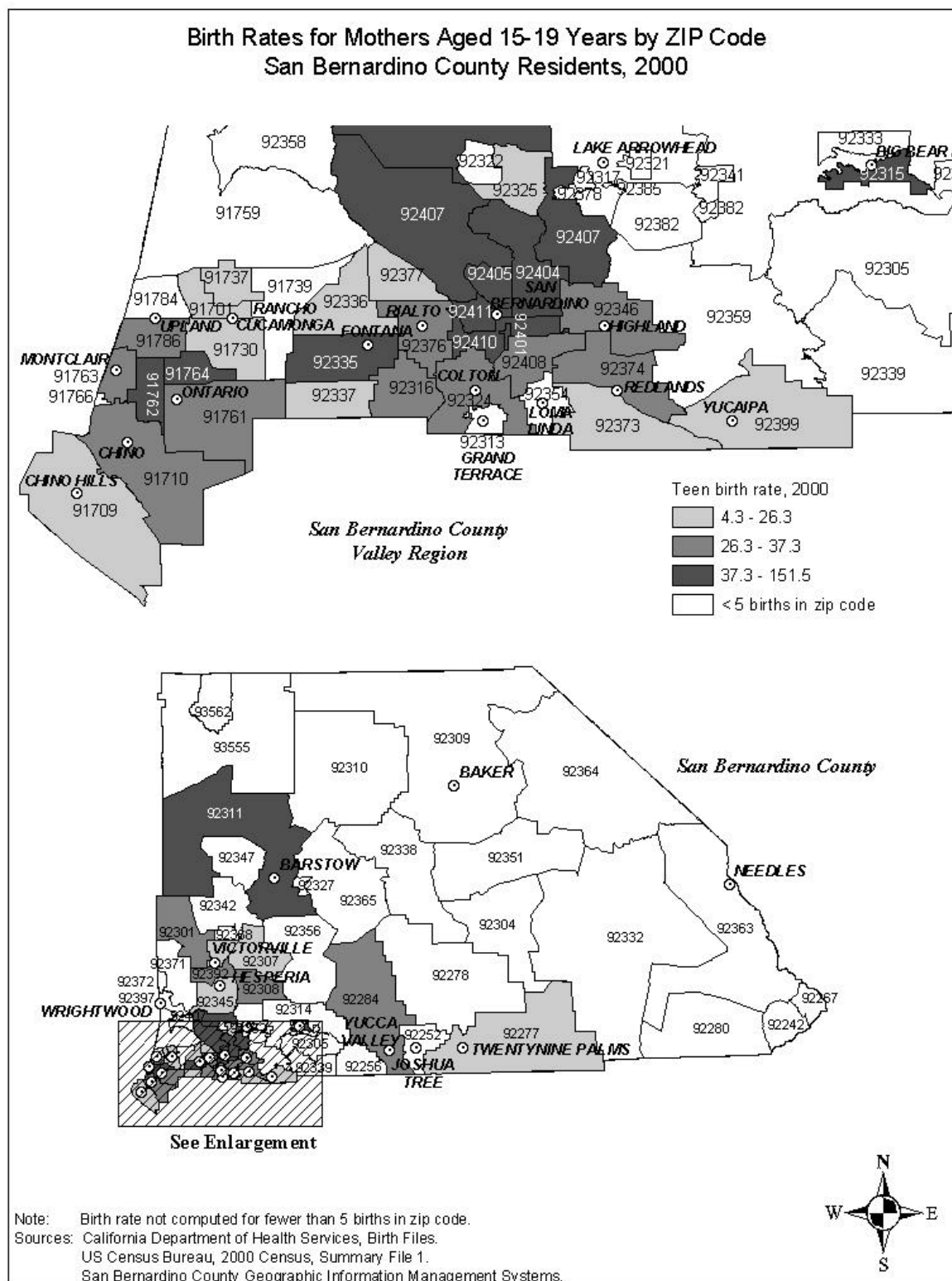
**Figure 4**

**Table 2**  
Live Birth Rates for Mothers 15-17 and 15-19 Years of Age  
California and San Bernardino County Residents, 1990-2000

Year	Mothers Aged 15-17 Years		Mothers Aged 15-19 Years	
	California	San Bernardino County	California	San Bernardino County
1990	44.2	52.4	70.0	89.9
1991	46.5	54.9	72.9	90.3
1992	45.6	52.3	71.7	85.4
1993	45.8	53.6	71.3	85.9
1994	45.2	54.8	70.2	83.6
1995	42.9	48.6	67.2	79.8
1996	38.3	45.0	61.6	73.9
1997	35.7	41.7	56.7	68.7
1998	32.6	38.4	53.2	64.7
1999	30.1	37.2	50.2	63.1
2000	27.2	31.6	48.1	57.7

Note: Live birth rate defined as live births per 1,000 females in specified age group.  
Sources: California Department of Health Services, Birth Files.  
California Department of Finance, *Race/Ethnic Population With Age and Sex Detail, 1970-2040*, December 1998.

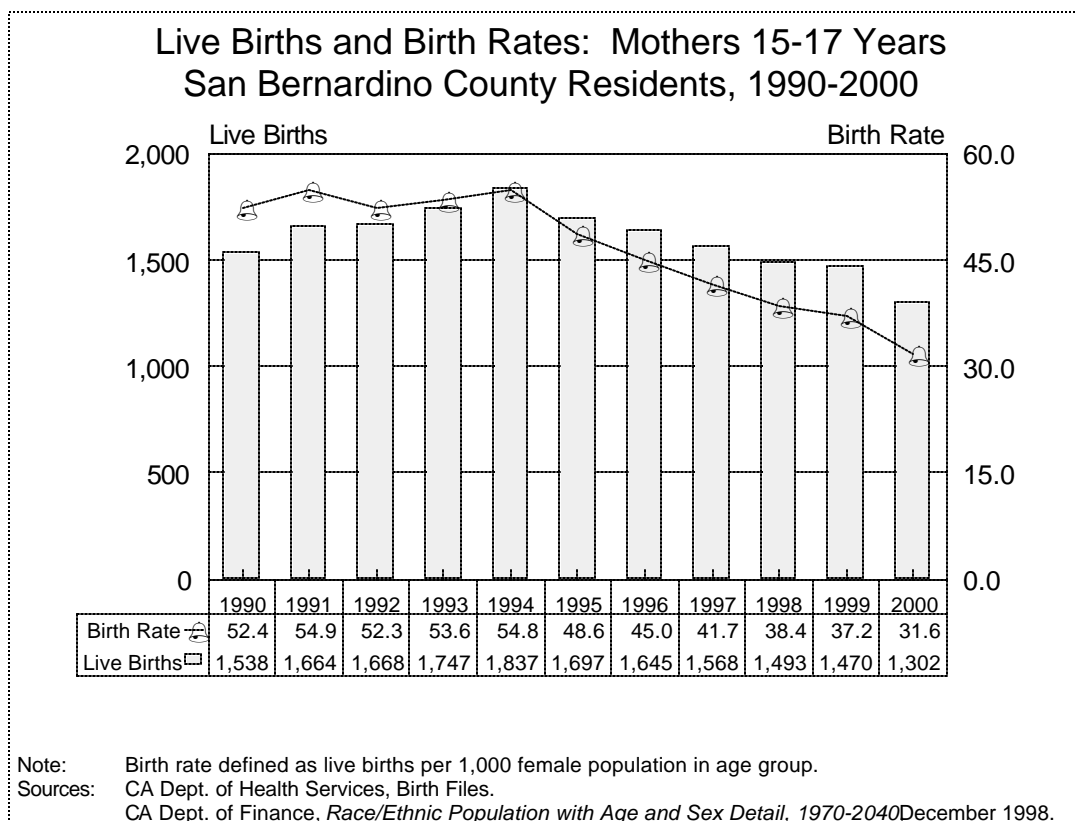
San Bernardino County teen birth rates vary geographically within the county. Figure 5 presents a map of birth rates for 15-19 year old mothers by residence zip code in 2000. Higher birth rates for this age group are observed in the Barstow area in the high desert, as well as the city of San Bernardino and portions of Fontana and Ontario. A relatively high birth rate also is evident in the Big Bear Lake area; however, the rate is based on a small number of births (6) and is considered unreliable.



**Figure 5**



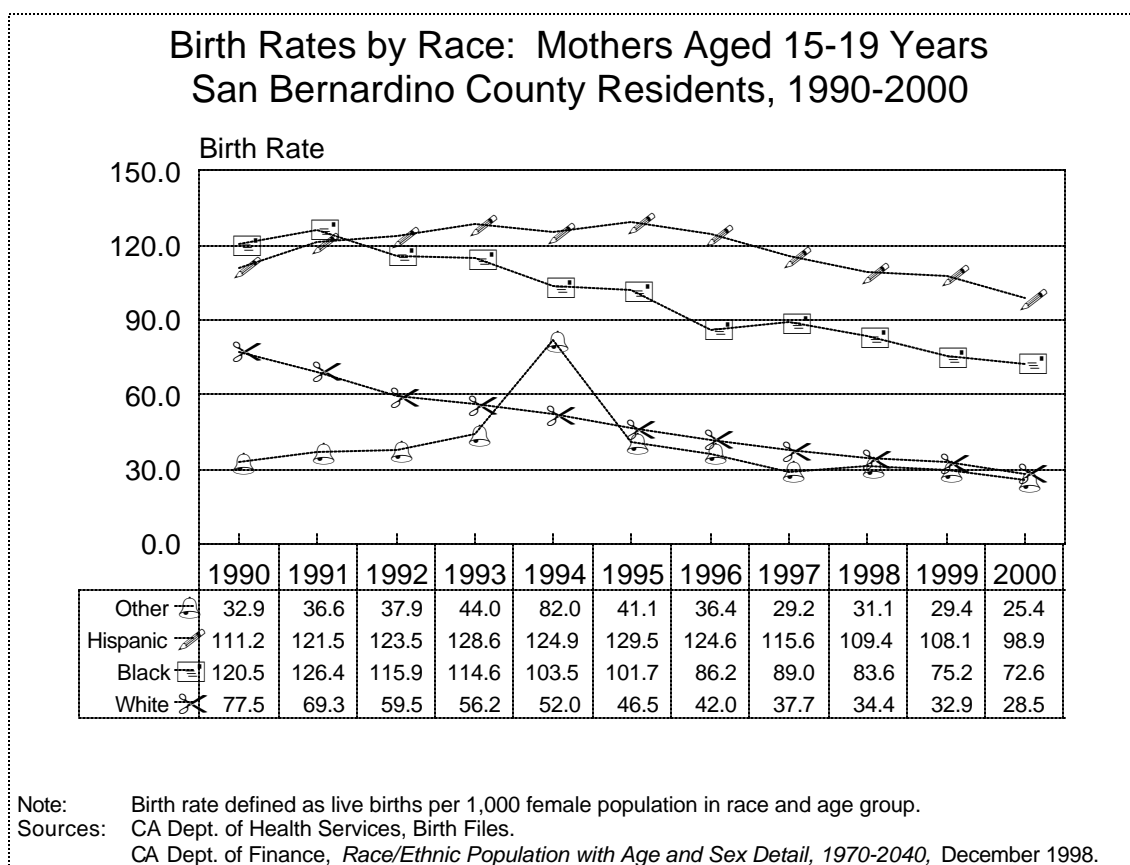
The live birth rate for mothers 15-17 years of age also has shown a dramatic decrease since 1994. In 2000, the rate for San Bernardino County residents was 31.6 live births per 1,000 female population 15 through 17 years, 42% lower than the highest rate during the review period, 54.8 in 1994.



**Figure 6**

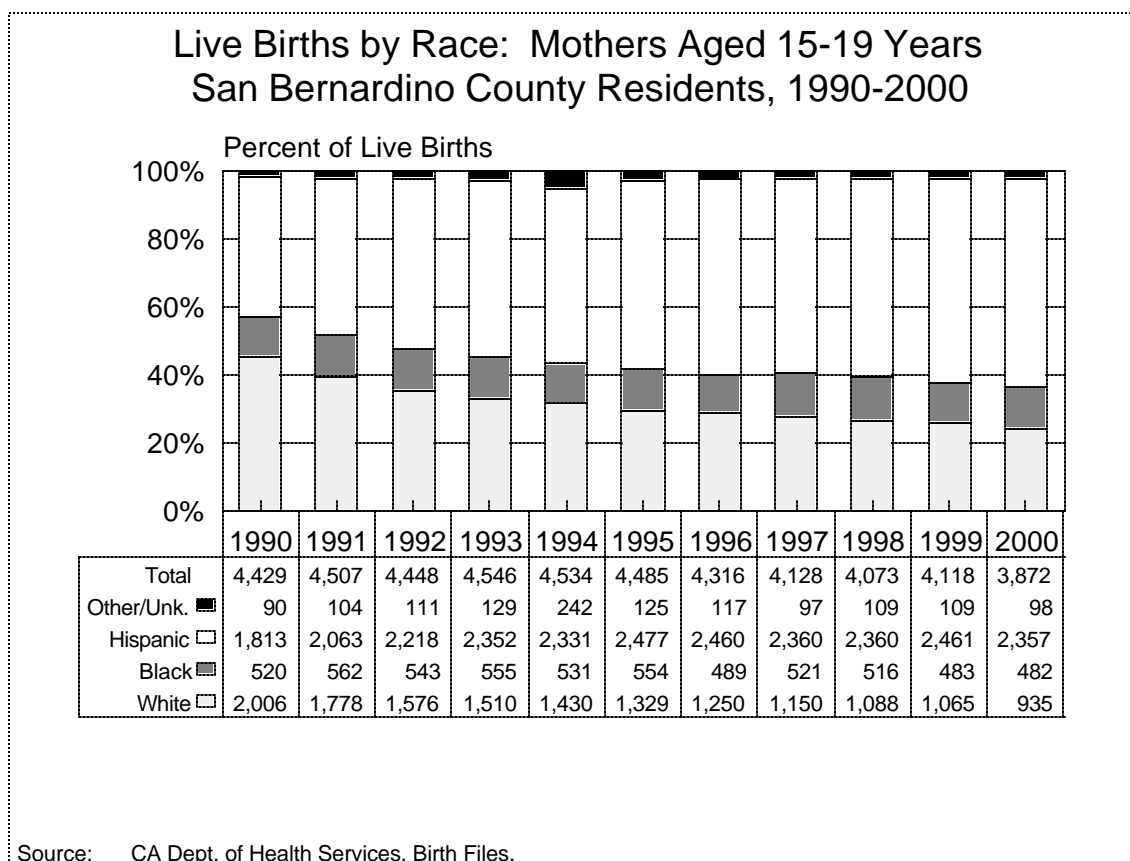
## Live Births and Birth Rates by Race/Ethnicity of Mother: Teen Mothers

Live birth rates for teen mothers aged 15-19 years by mother's race/ethnicity are displayed in Figure 7. All race groups have experienced some decline in the birth rate; the decline has been observed since 1990 among whites and 1991 among blacks. The birth rate for black teens declined 43% from 1991 to 2000, and the rate for whites declined 63% from 1990 to 2000. Among Hispanic mothers, the birth rate increased from 1990 to 1995 and then began to decline; the 2000 birth rate was 11 percent lower in 2000 than in 1990 (98.9 compared to 111.2 respectively). Among mothers of race/ethnicities other than white, black, and Hispanic, little change was observed over the decade, although this group has the lowest birth rates of all race/ethnic groups. The apparent increase in 1994 for mothers of other race/ethnicity is an artifact of reporting and data collection during that single year; see discussion on page 11.



**Figure 7**

Similar to the trend for live births to women of all ages, among mothers aged 15 through 19 years, the proportion of births occurring in each race/ethnic group changed during the 1990's, as portrayed in Figure 8. From 1990 to 2000, births to white teen mothers dropped from 45 percent of teen births to 24 percent. During the same period, births to Hispanic teen mothers rose from 41 percent of teen births to 61 percent.



**Figure 8**

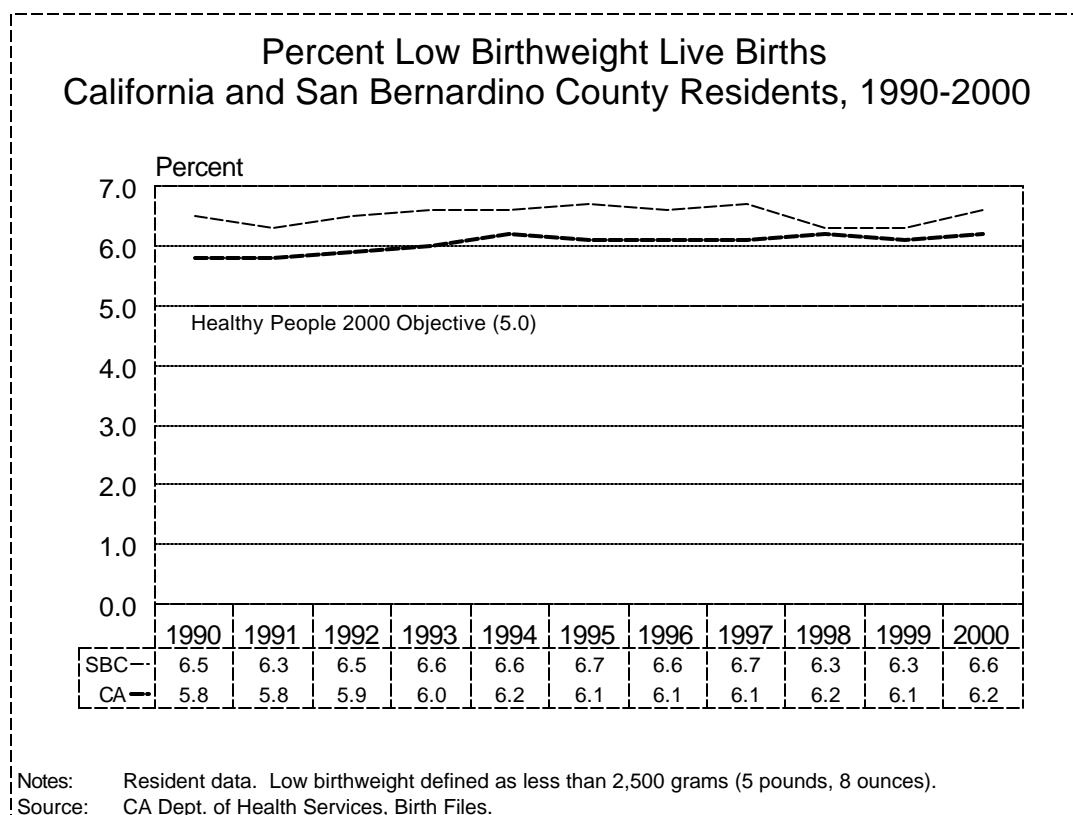
**LOW BIRTHWEIGHT LIVE BIRTHS**

Healthy People 2000 Objective: *Reduce low birthweight to an incidence of no more than 5.0 percent of live births.*

2000 Status: San Bernardino County 6.6%  
California 6.2%

Low birthweight is defined as birthweight of 2,499 grams (5 pounds, 8 ounces) or less. The low birthweight category includes very low birthweight live births, defined as 1,499 grams (3 pounds, 5 ounces) or less; very low birthweight births are discussed further in pages 24 through 27.

San Bernardino County's low birthweight proportion was higher than California's every year of the review period, as shown in Figure 9. The County rate was slightly higher in 2000 (6.6%) than 1990 (6.5%); the State proportion also was higher the last year than the first year of the review period (6.2% in 2000 versus 5.8% in 1990). There is no evidence from these percentages that either the County or the State has progressed toward the HP 2000 Objective in this area.



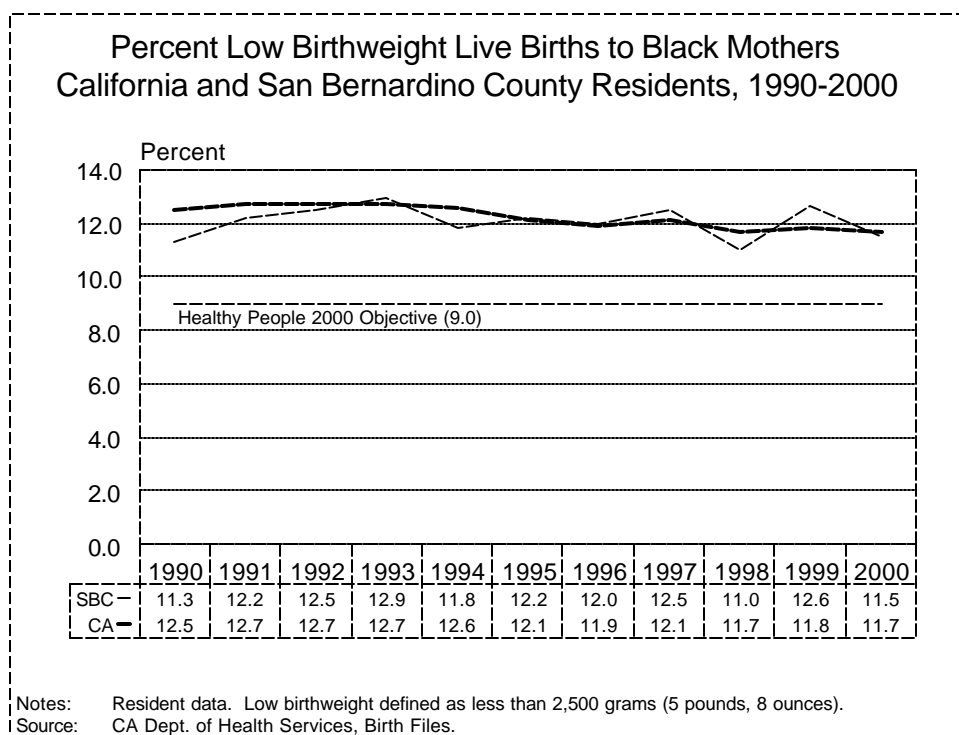
**Figure 9**

## Low Birthweight by Race/Ethnicity of Mother

Healthy People 2000 Objective:	<i>Reduce the incidence of low birthweight among blacks to no more than 9.0 percent.</i>	
2000 Status:	San Bernardino County 11.5%	
	California	11.7%

Figure 10 below shows a rather erratic pattern for the percentage of low birthweight among blacks in San Bernardino County, in which the County proportion was lower than the California proportion in half of the review period years. There is no obvious trend of the County moving towards the HP 2000 Objective of 9.0. However, between 1993 and 2000 the State percentage decreased.

The number and percent of low birthweight live births by mother's race/ethnicity are presented in Table 3. Figures 11 and 12 show percent low birthweight for Hispanic and white mothers, respectively. Neither the County nor State proportion of low birthweight among Hispanic and white mothers demonstrated a downward trend over the review period. County proportions for Hispanics were lower than the State proportions only in 1998 and 1999. County proportions among white mothers were higher than the State proportions every year.



**Figure 10**

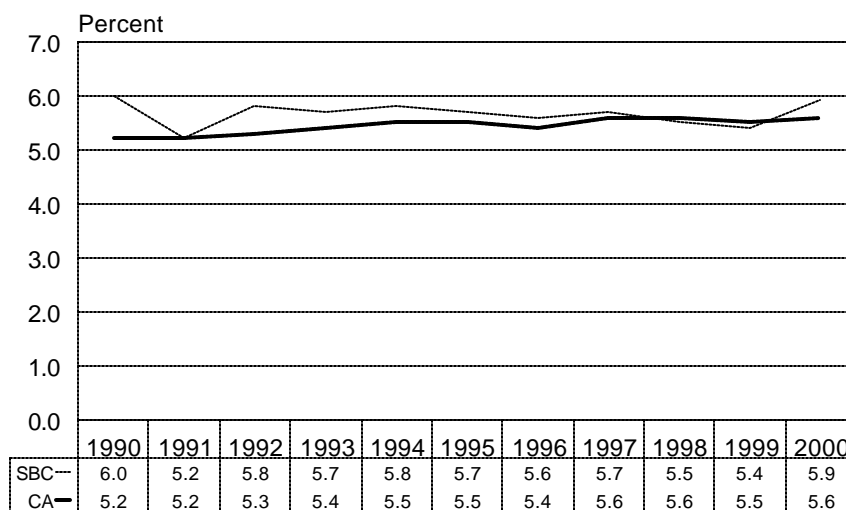
**Table 3**  
 Number and Percent of Low Birthweight Live Births by Race/Ethnicity of Mother  
 California and San Bernardino County Residents, 1990-2000

Race/ Ethnicity	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
<b>NUMBER</b>											
<b>California</b>											
Total	35,474	35,359	35,608	35,116	34,876	33,588	32,649	32,232	32,438	31,686	32,853
Black	6,026	5,934	5,788	5,587	5,218	4,736	4,420	4,356	4,119	4,045	3,945
Hispanic	12,732	13,351	13,960	14,224	14,228	13,929	13,809	13,879	13,887	13,805	14,377
White	12,972	12,174	11,863	11,438	11,323	10,909	10,255	9,770	10,132	9,548	9,745
Other	3,744	3,900	3,997	3,867	4,107	4,014	4,165	4,227	4,300	4,288	4,786
<b>San Bernardino County</b>											
Total	2,177	2,076	2,138	2,129	2,074	2,018	1,941	1,895	1,771	1,788	1,881
Black	323	380	392	392	339	341	322	331	302	338	308
Hispanic	662	655	756	780	789	799	806	809	784	791	886
White	1,078	927	859	841	770	750	699	650	578	544	564
Other	114	114	131	116	176	128	114	105	107	115	123
<b>PERCENT</b>											
<b>California</b>											
Total	5.8%	5.8%	5.9%	6.0%	6.2%	6.1%	6.1%	6.1%	6.2%	6.1%	6.2%
Black	12.5%	12.7%	12.7%	12.7%	12.6%	12.1%	11.9%	12.1%	11.7%	11.8%	11.7%
Hispanic	5.2%	5.2%	5.3%	5.4%	5.5%	5.5%	5.4%	5.6%	5.6%	5.5%	5.6%
White	5.1%	5.0%	5.2%	5.3%	5.5%	5.6%	5.5%	5.5%	5.7%	5.5%	5.7%
Other	6.1%	6.3%	6.3%	6.2%	6.5%	6.5%	6.8%	6.8%	7.0%	6.9%	7.0%
<b>San Bernardino County</b>											
Total	6.5%	6.3%	6.5%	6.6%	6.6%	6.7%	6.6%	6.7%	6.3%	6.3%	6.6%
Black	11.3%	12.2%	12.5%	12.9%	11.8%	12.2%	12.0%	12.5%	11.0%	12.6%	11.5%
Hispanic	6.0%	5.2%	5.8%	5.7%	5.8%	5.7%	5.6%	5.7%	5.5%	5.4%	5.9%
White	6.0%	5.9%	5.8%	6.2%	6.2%	6.5%	6.5%	6.6%	6.0%	5.7%	6.1%
Other	7.2%	6.6%	7.2%	6.5%	6.9%	7.1%	6.8%	6.7%	6.9%	7.4%	7.3%

Source: California Department of Health Services, Birth Files.

The geographic variation in the proportion of low birthweight live births for the year 2000 is presented in Figure 13. ZIP codes with the highest proportion of low birthweight births in 2000 included Chino Hills, Rialto, Lytle Creek, Mt. Baldy, Wrightwood, Colton, Rialto, northwest San Bernardino, north Redlands, Phelan, and the Morongo Basin.

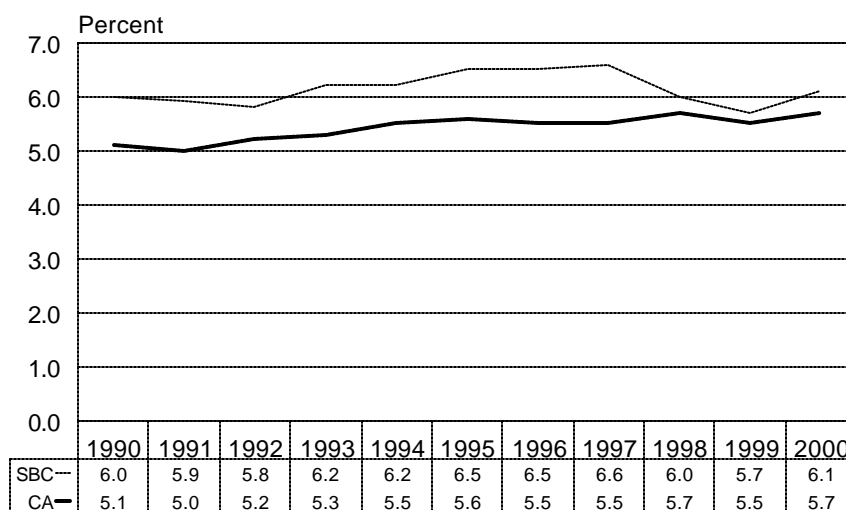
### Percent Low Birthweight Live Births to Hispanic Mothers California and San Bernardino County Residents, 1990-2000



Notes: Resident data. Low birthweight defined as less than 2,500 grams (5 pounds, 8 ounces).  
Source: CA Dept. of Health Services, Birth Files.

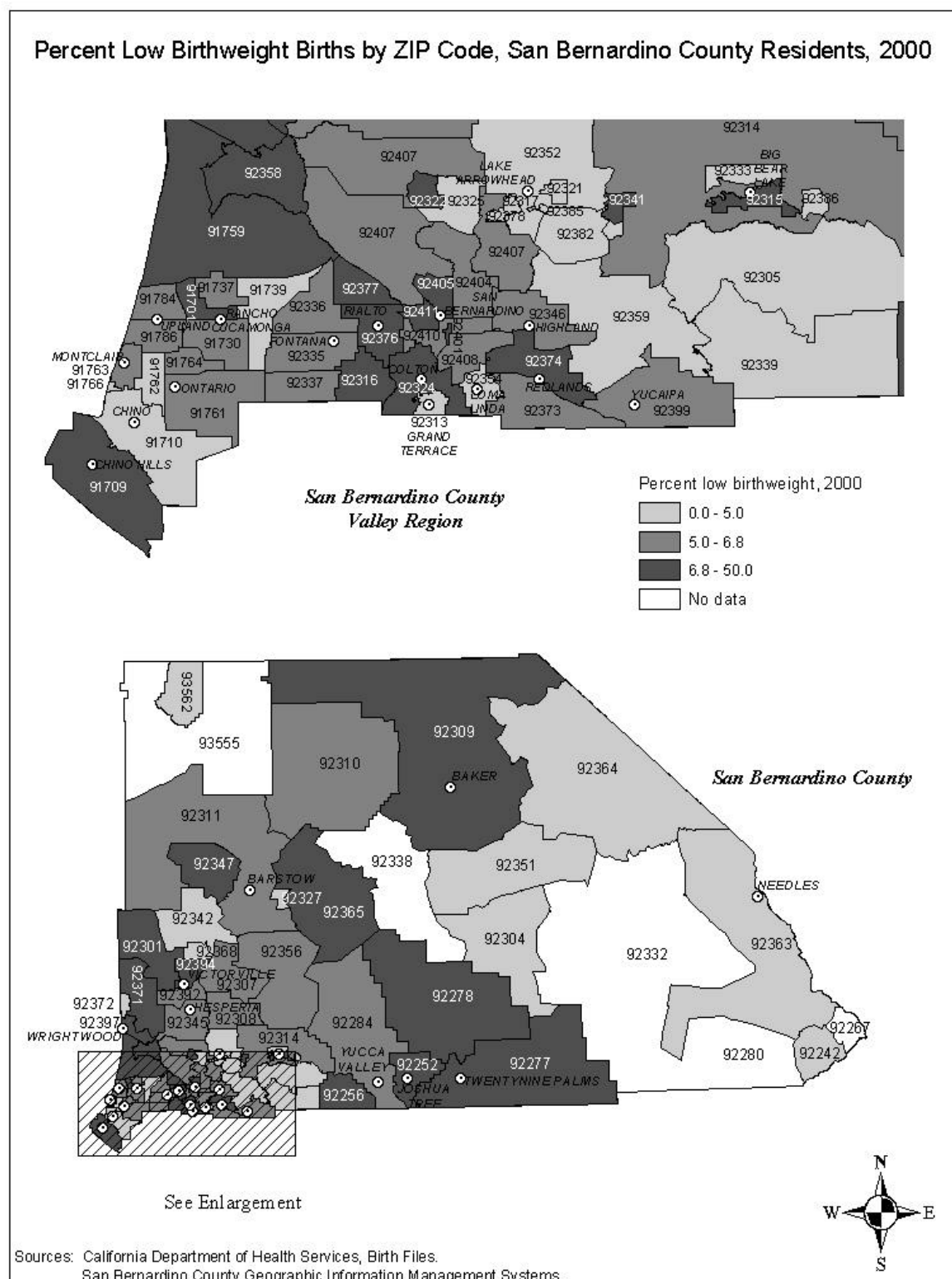
**Figure 11**

### Percent Low Birthweight Live Births to White Mothers California and San Bernardino County Residents, 1990-2000



Notes: Resident data. Low birthweight defined as less than 2,500 grams (5 pounds, 8 ounces).  
Source: CA Dept. of Health Services, Birth Files.

**Figure 12**



**Figure 13**

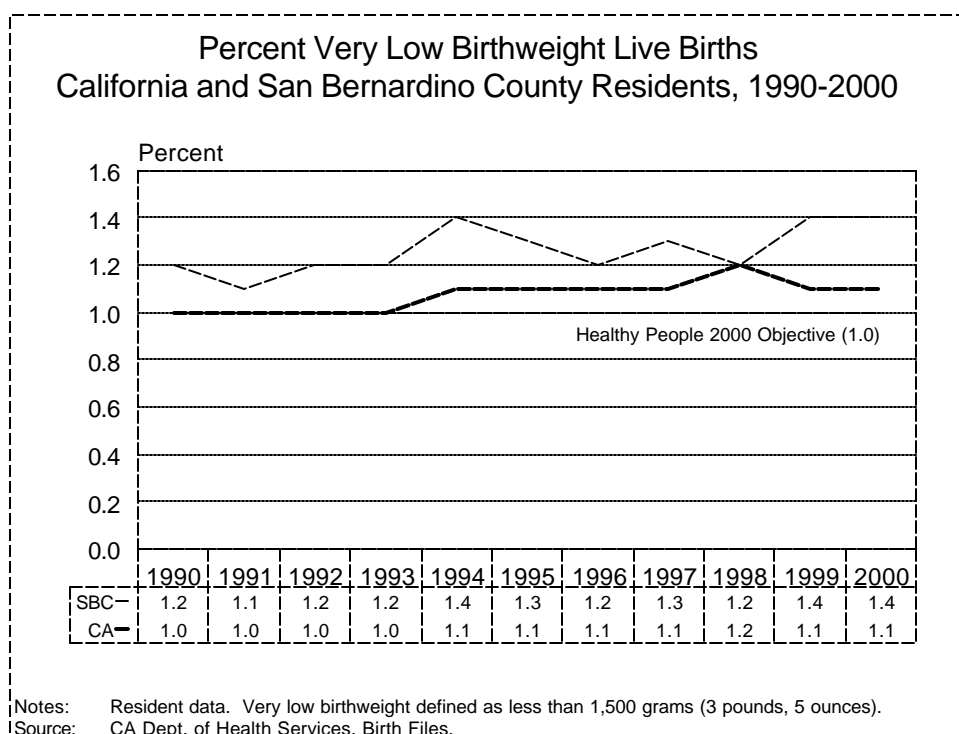


**VERY LOW BIRTHWEIGHT LIVE BIRTHS**

Healthy People 2000 Objective:	<i>Reduce very low birthweight to an incidence of no more than 1.0 percent of live births.</i>	
2000 Status:	San Bernardino County 1.4%	
	California	1.1%

Very low birthweight (VLBW) is defined as birthweight of 1,499 grams (3 pounds, 5 ounces) or less. This birthweight category is a subset of low birthweight, which is defined as 2,499 grams (5 pounds, 8 ounces) or less.

The percentage of VLBW live births in California met the HP 2000 objective of 1.0 for the first four years of the ten year review period, but then failed to meet the objective for the last seven years. San Bernardino County's percentage of VLBW live births was higher than the State's ten of the eleven years, and was higher during the last half of the review period than during the first half (Figure 14).



**Figure 14**

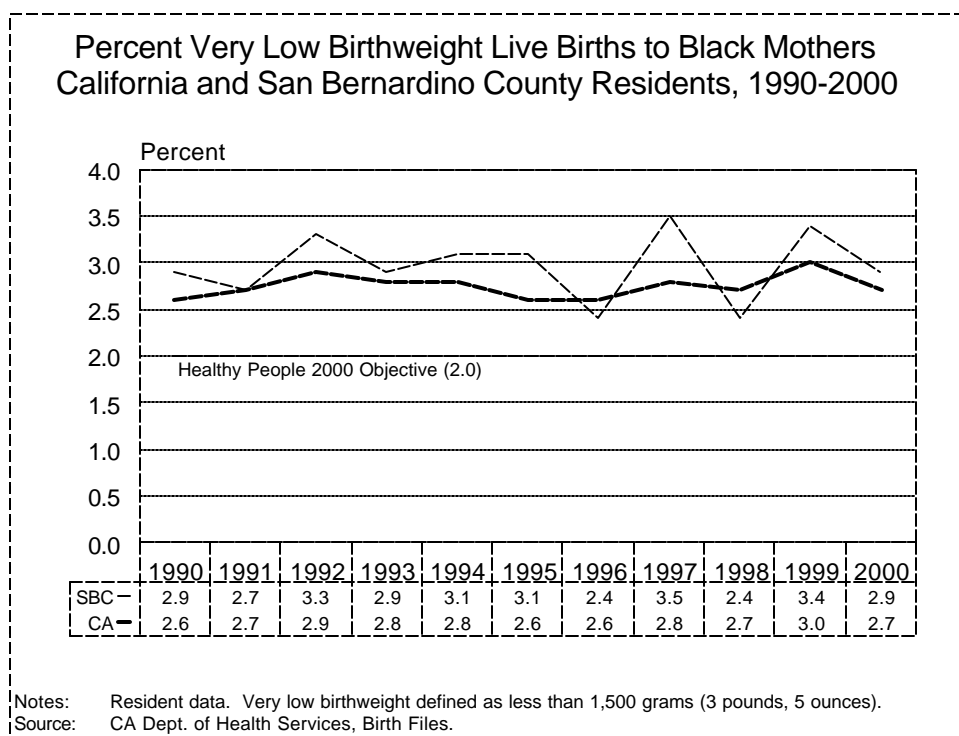
## Very Low Birthweight by Race/Ethnicity of Mother

Healthy People 2000 Objective: *Reduce very low birthweight among blacks to an incidence of no more than 2.0 percent.*

2000 Status: San Bernardino County 2.9%  
California 2.7%

The incidence of VLBW among blacks in San Bernardino County demonstrated an erratic pattern over the review period, and never met the HP 2000 Objective (Figure 15). The 2000 percentage of 2.9 is identical to the 1990 percentage. The percentage for California was lower than that for the County in eight of the eleven review years.

Very low birthweight live births by race/ethnicity of mother for California and San Bernardino County are shown in Table 4. Among California Hispanics the percentage was fairly constant at 0.9% for the first four years and at 1.0% for the last seven years (Figure 16). California Hispanics met the HP2000 objective each year; this was not true for any other race/ethnic group nor for San Bernardino County overall. The County's rate fluctuated between 0.9% and 1.3% over the review period. The percentage of VLBW among San Bernardino County white mothers was higher than the State's each year (Figure 17), and increased by 20% over the review period.



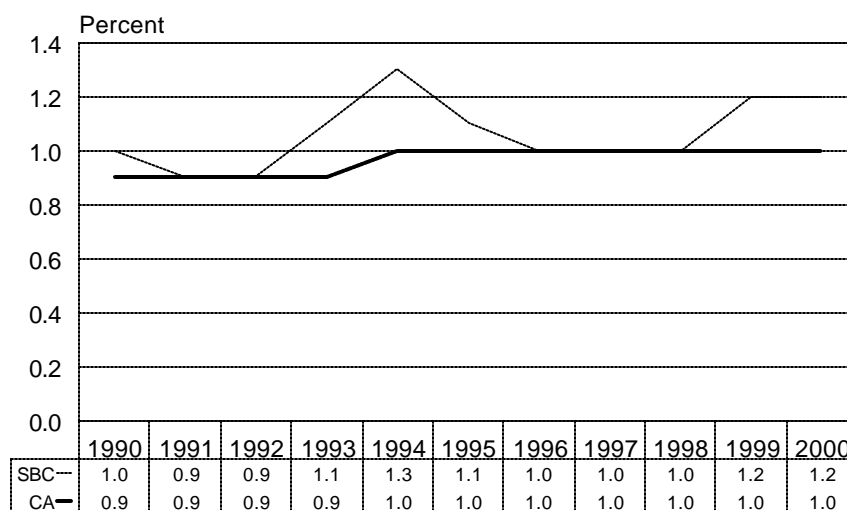
**Figure 15**

**Table 4**  
 Number and Percent of Very Low Birthweight Live Births by Race/Ethnicity of Mother  
 California and San Bernardino County Residents, 1990-2000

Race/ Ethnicity	Year										
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
<b>NUMBER</b>											
<b>California</b>											
Total	6,152	6,223	6,209	6,099	6,282	5,877	5,812	5,869	6,013	5,950	6,075
Black	1,275	1,252	1,304	1,240	1,166	1,017	949	998	939	1,018	923
Hispanic	2,204	2,321	2,378	2,465	2,584	2,522	2,581	2,526	2,601	2,569	2,655
White	2,136	2,114	1,954	1,883	1,940	1,752	1,670	1,714	1,774	1,675	1,738
Other	537	536	573	511	592	586	612	631	699	688	759
<b>San Bernardino County</b>											
Total	387	369	402	401	434	396	359	377	341	391	387
Black	82	85	104	88	88	87	65	93	66	91	79
Hispanic	112	110	123	145	170	159	144	145	148	170	180
White	178	153	147	148	150	129	125	125	103	111	107
Other	15	21	28	20	26	21	25	14	24	19	21
<b>PERCENT</b>											
<b>California</b>											
Total	1.0%	1.0%	1.0%	1.0%	1.1%	1.1%	1.1%	1.1%	1.2%	1.1%	1.1%
Black	2.6%	2.7%	2.9%	2.8%	2.8%	2.6%	2.6%	2.8%	2.7%	3.0%	2.7%
Hispanic	0.9%	0.9%	0.9%	0.9%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
White	0.8%	0.9%	0.9%	0.9%	0.9%	0.9%	0.9%	1.0%	1.0%	1.0%	1.0%
Other	0.9%	0.9%	0.9%	0.8%	0.9%	0.9%	1.0%	1.0%	1.1%	1.1%	1.1%
<b>San Bernardino County</b>											
Total	1.2%	1.1%	1.2%	1.2%	1.4%	1.3%	1.2%	1.3%	1.2%	1.4%	1.4%
Black	2.9%	2.7%	3.3%	2.9%	3.1%	3.1%	2.4%	3.5%	2.4%	3.4%	2.9%
Hispanic	1.0%	0.9%	0.9%	1.1%	1.3%	1.1%	1.0%	1.0%	1.0%	1.2%	1.2%
White	1.0%	1.0%	1.0%	1.1%	1.2%	1.1%	1.2%	1.3%	1.1%	1.2%	1.2%
Other	0.9%	1.2%	1.5%	1.1%	1.0%	1.2%	1.5%	0.9%	1.6%	1.2%	1.2%

Source: California Department of Health Services, Birth Files.

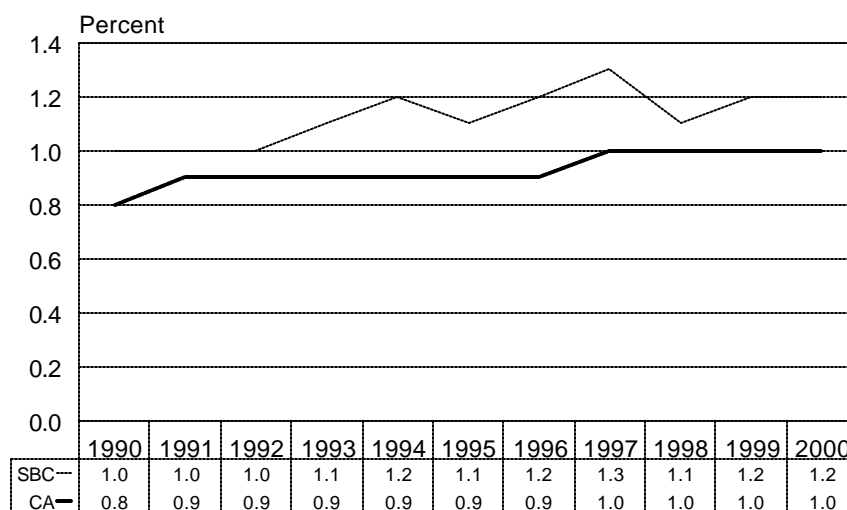
### Percent Very Low Birthweight Live Births to Hispanic Mothers California and San Bernardino County Residents, 1990-2000



Notes: Resident data. Very low birthweight defined as less than 1,500 grams (3 pounds, 5 ounces).  
Source: CA Dept. of Health Services, Birth Files.

**Figure 16**

### Percent Very Low Birthweight Live Births to White Mothers California and San Bernardino County Residents, 1990-2000



Notes: Resident data. Very low birthweight defined as less than 1,500 grams (3 pounds, 5 ounces).  
Source: CA Dept. of Health Services, Birth Files.

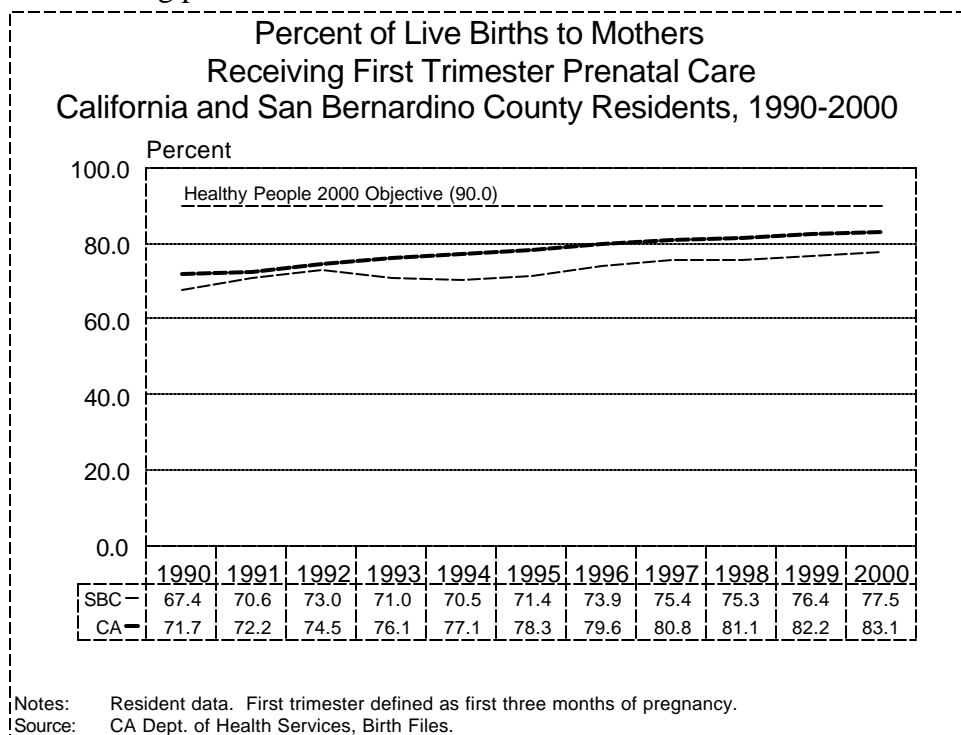
**Figure 17**

# **FIRST TRIMESTER PRENATAL CARE**

Healthy People 2000 Objective:	<i>Increase to at least 90 percent the proportion of all pregnant women who receive prenatal care in the first trimester of pregnancy.</i>	
2000 Status:	San Bernardino County	77.5%
	California	83.1%

Both San Bernardino County and the State of California showed improvement in first trimester prenatal care over the review period, although neither achieved the HP 2000 Objective (Figure 18). The County's percentages were consistently lower than the State's. County and State percentages were respectively 15 and 16 percent higher in 2000 than 1990.

The proportion of mothers beginning prenatal care during the first trimester in 2000 is presented geographically in Figure 19. These maps show that mothers with the lowest rates of first trimester prenatal care onset live in areas ranging from the densely populated urban valley to remote desert and mountain communities. In the valley communities of Ontario, Fontana, Rialto, San Bernardino, and Colton, both public transportation and medical providers are readily available; further study is warranted to discover the reasons for not accessing prenatal care.



**Figure 18**

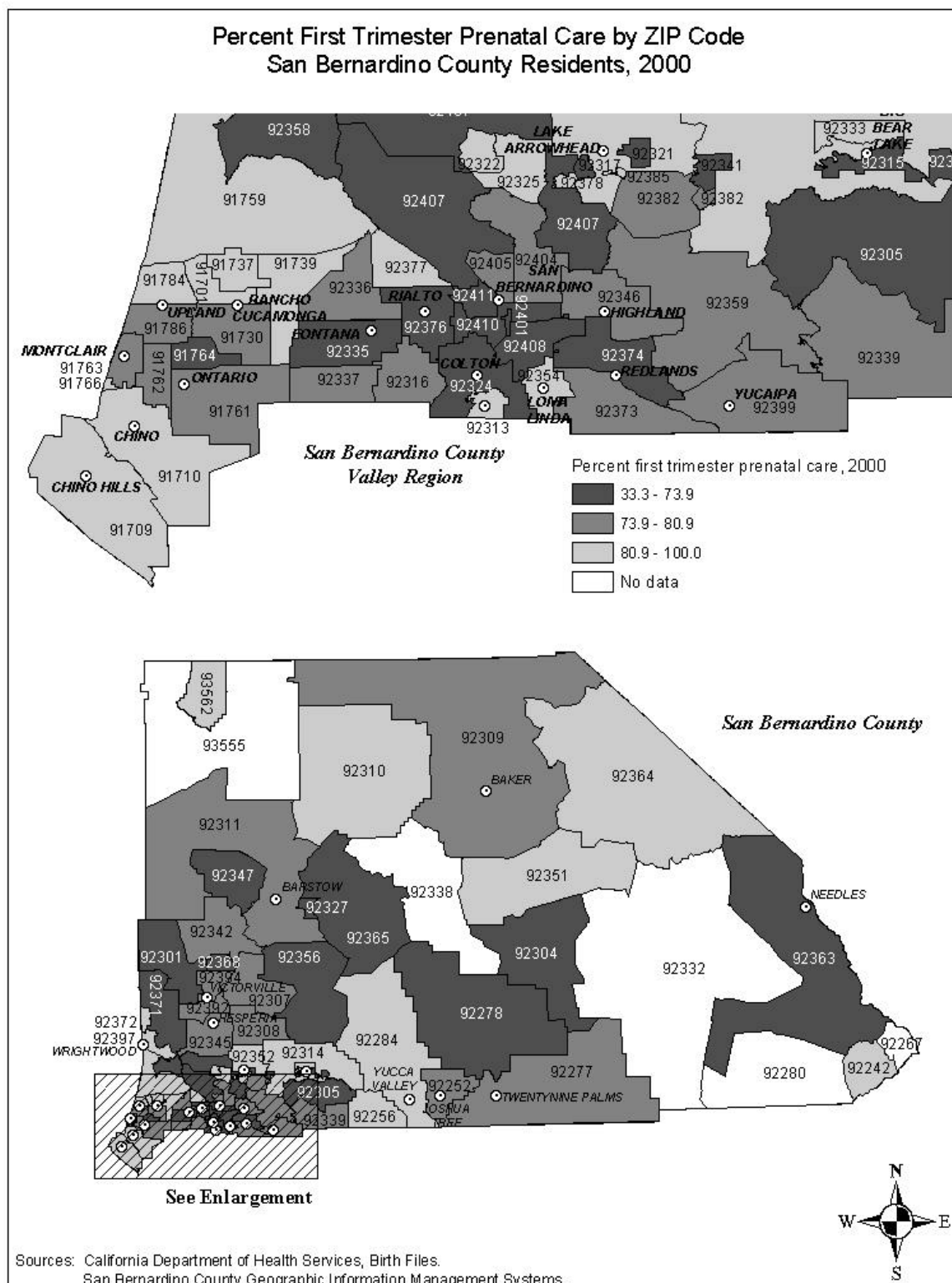


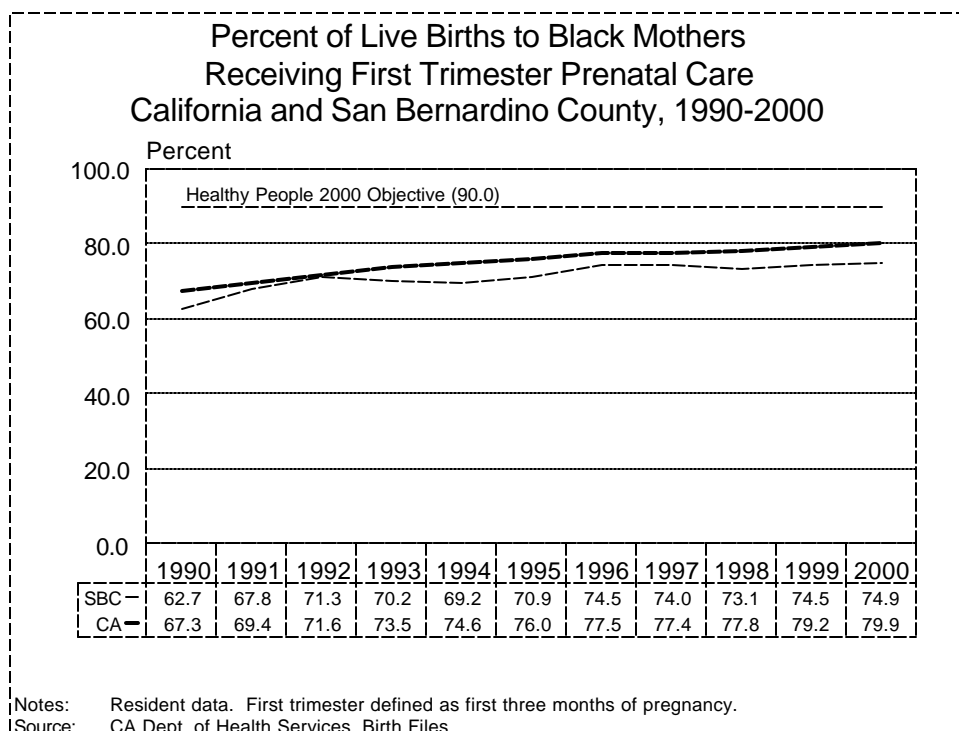
Figure 19

# **First Trimester Prenatal Care by Race/Ethnicity of Mother**

Healthy People 2000 Objective:	<i>Increase to at least 90 percent the proportion of black and Hispanic women who receive prenatal care in the first trimester of pregnancy.</i>	
2000 Status, Black Mothers:	San Bernardino County	74.9%
	California	79.9%
2000 Status, Hispanic Mothers:	San Bernardino County	74.6%
	California	79.3%

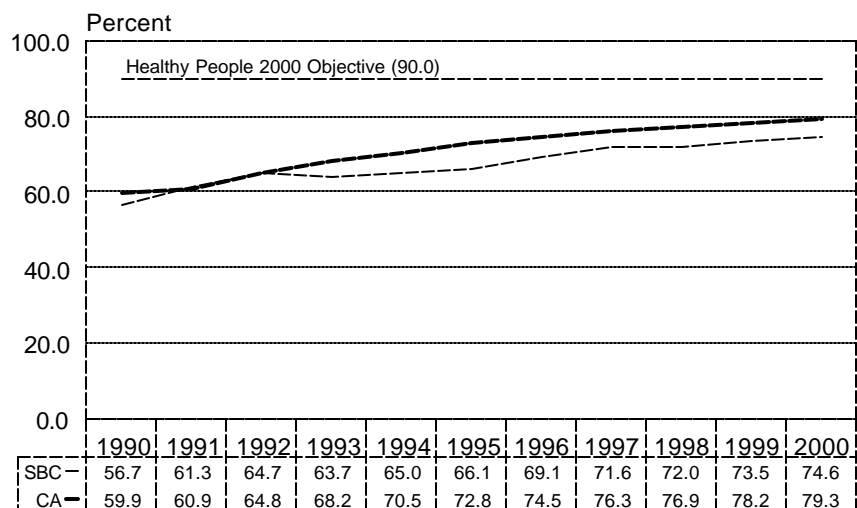
The percentage of San Bernardino County black mothers receiving first trimester prenatal care is slightly lower than California black mothers (Figure 20). Both groups have made progress towards approaching the HP 2000 Objective, with the both the County and the State improving 19 percent over the review period. Hispanic mothers in California and the County had slightly lower proportions receiving first trimester care compared to either black or white mothers. The County's proportions were lower than the State's for Hispanics in all years except 1991 (Figure 21).

The greatest difference between County and State figures were for white mothers (Figure 22). San Bernardino County percentages were consistently lower than the State's among whites. Among the three race/ethnicity groups studied, whites had the highest proportion of mothers receiving prenatal care in the first trimester of pregnancy, with California whites nearly achieving the HP 2000 objective (Table 5).



**Figure 20**

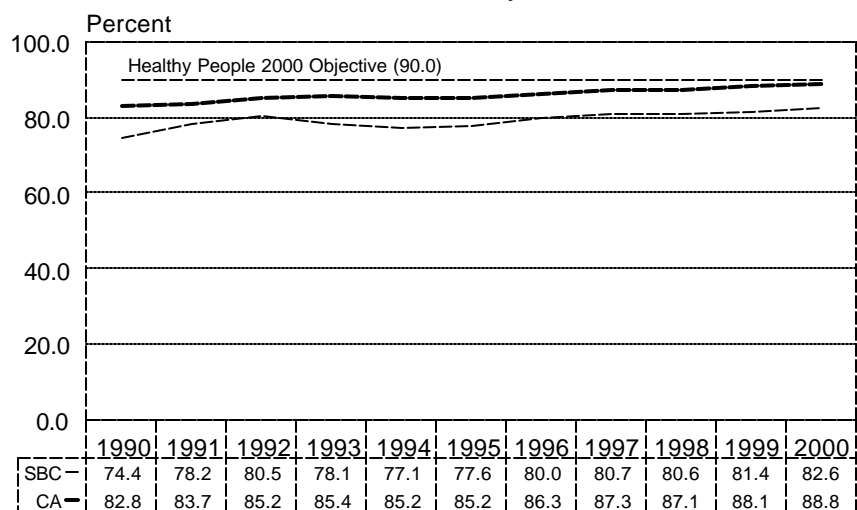
Percent of Live Births to Hispanic Mothers  
Receiving First Trimester Prenatal Care  
California and San Bernardino County Residents, 1990-2000



Notes: Resident data. First trimester defined as first three months of pregnancy.  
Source: CA Dept. of Health Services, Birth Files.

Figure 21

Percent of Live Births to White Mothers  
Receiving First Trimester Prenatal Care Onset  
California and San Bernardino County Residents, 1990-2000



Notes: Resident data. First trimester defined as first three months of pregnancy.  
Source: CA Dept. of Health Services, Birth Files.

Figure 22



**Table 5**  
**Number and Percent of Live Births to Mothers Receiving First Trimester Prenatal Care**  
**California and San Bernardino County Residents, 1990-2000**

Race/ Ethnicity	Year										
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
<b>NUMBER</b>											
<b>California</b>											
Total	438,407	439,733	447,434	445,079	437,094	431,572	428,724	423,640	422,866	426,020	441,712
Black	32,376	32,445	32,604	32,216	30,930	29,764	28,711	27,834	27,398	27,030	26,973
Hispanic	147,064	157,066	170,756	178,797	181,384	184,754	189,779	189,830	190,523	195,020	204,435
White	212,466	202,963	194,539	184,399	174,351	167,211	159,868	154,741	153,765	151,573	151,921
Other	46,501	47,259	49,535	49,667	50,429	49,843	50,366	51,235	51,180	52,397	58,383
<b>San Bernardino County</b>											
Total	22,506	23,318	23,971	22,903	22,186	21,492	21,707	21,339	21,256	21,704	22,218
Black	1,794	2,103	2,244	2,136	1,992	1,980	1,992	1,966	2,006	2,004	2,006
Hispanic	6,247	7,688	8,490	8,754	8,807	9,257	9,891	10,195	10,323	10,751	11,257
White	13,337	12,240	11,864	10,665	9,614	8,942	8,550	7,947	7,749	7,752	7,587
Other	1,128	1,287	1,373	1,348	1,773	1,313	1,274	1,231	1,178	1,197	1,368
<b>PERCENT</b>											
<b>California</b>											
Total	71.7%	72.2%	74.5%	76.1%	77.1%	78.3%	79.6%	80.8%	81.1%	82.2%	83.1%
Black	67.3%	69.4%	71.6%	73.5%	74.6%	76.0%	77.5%	77.4%	77.8%	79.2%	79.9%
Hispanic	59.9%	60.9%	64.8%	68.2%	70.5%	72.8%	74.5%	76.3%	76.9%	78.2%	79.3%
White	82.8%	83.7%	85.2%	85.4%	85.2%	85.2%	86.3%	87.3%	87.1%	88.1%	88.8%
Other	75.4%	76.2%	77.9%	79.2%	79.6%	80.3%	81.7%	82.5%	83.0%	83.7%	85.3%
<b>San Bernardino County</b>											
Total	67.4%	70.6%	73.0%	71.0%	70.5%	71.4%	73.9%	75.4%	75.3%	76.4%	77.5%
Black	62.7%	67.8%	71.3%	70.2%	69.2%	70.9%	74.5%	74.0%	73.1%	74.5%	74.9%
Hispanic	56.7%	61.3%	64.7%	63.7%	65.0%	66.1%	69.1%	71.6%	72.0%	73.5%	74.6%
White	74.4%	78.2%	80.5%	78.1%	77.1%	77.6%	80.0%	80.7%	80.6%	81.4%	82.6%
Other	71.3%	75.0%	75.5%	75.1%	69.2%	73.0%	76.1%	78.4%	76.1%	76.8%	80.7%

Source: California Department of Health Services, Birth Files.

**PAY SOURCE FOR PRENATAL CARE**

Table 6 shows that over the past decade, a slightly higher percentage of San Bernardino County resident live births have prenatal care paid by Medi-Cal compared to California overall. In 2000, prenatal care for 43% of San Bernardino County's births was paid by Medi-Cal, compared to 40% for California.

**Table 6**  
Live Births by Pay Source for Prenatal Care  
California and San Bernardino County Residents, 1990-2000

	Mother's Residence							
	California				San Bernardino County			
	Pay Source for Prenatal Care							
	Medi-Cal		Other		Medi-Cal		Other	
	Number	%	Number	%	Number	%	Number	%
1990	201,903	33.0	409,763	67.0	12,371	37.0	21,022	63.0
1991	240,260	39.4	368,968	60.6	13,736	41.6	19,285	58.4
1992	261,265	43.5	339,573	56.5	14,667	44.7	18,154	55.3
1993	266,948	45.7	317,535	54.3	15,495	48.0	16,754	52.0
1994	265,017	46.7	302,017	53.3	15,595	49.6	15,862	50.4
1995	254,782	46.2	296,444	53.8	14,544	48.3	15,565	51.7
1996	245,939	45.7	292,689	54.3	14,249	48.5	15,110	51.5
1997	222,445	42.4	301,729	57.6	12,842	45.3	15,477	54.7
1998	207,824	39.9	313,441	60.1	12,233	43.3	16,012	56.7
1999	204,919	39.6	313,154	60.4	12,380	43.6	16,017	56.4
2000	211,290	39.8	319,995	60.2	12,433	43.4	16,224	56.6

Source: California Department of Health Services, Birth Files.

**METHOD OF DELIVERY**

Table 7 presents the method of delivery of live births among California and San Bernardino County residents from 1990 through 2000. The percentage of births delivered by cesarean section has increased by about one percentage point in both jurisdictions. The proportion of cesarean births was slightly higher for San Bernardino County residents in all years of the review period.

**Table 7**  
Live Births by Method of Delivery  
California and San Bernardino County Residents, 1990-2000

	California				San Bernardino County			
	Method of Delivery							
	Cesarean Section		Vaginal Delivery or Unknown		Cesarean Section		Vaginal Delivery or Unknown	
	Number	%	Number	%	Number	%	Number	%
1990	136,095	22.2	475,571	77.8	7,547	22.6	25,846	77.4
1991	135,618	22.3	473,610	77.7	7,571	22.9	25,450	77.1
1992	129,546	21.6	471,292	78.4	7,190	21.9	25,631	78.1
1993	124,559	21.3	459,924	78.7	7,178	22.3	25,071	77.7
1994	117,816	20.8	449,218	79.2	6,818	21.7	24,639	78.3
1995	113,623	20.6	437,603	79.4	6,471	21.5	23,638	78.5
1996	110,807	20.6	427,821	79.4	6,305	21.5	23,054	78.5
1997	109,995	21.0	414,179	79.0	6,245	22.1	22,074	77.9
1998	113,114	21.7	408,151	78.3	6,306	22.3	21,939	77.7
1999	117,568	22.7	400,505	77.3	6,632	23.4	21,765	76.6
2000	124,467	23.4	406,818	76.6	6,722	23.5	21,935	76.5

Source: California Department of Health Services, Birth Files.

**MOTHER'S PLACE OF BIRTH**

Over the past decade, a smaller percentage of San Bernardino County resident live births were to foreign born mothers compared to California, as shown in Table 8. In 2000, 33% of San Bernardino County mothers giving birth were not born in the United States, compared to 46% of California mothers.

**Table 8**  
Live Births by Mother's Place of Birth  
California and San Bernardino County Residents, 1990-2000

	Mother's Residence							
	California				San Bernardino County			
	Mother's Place of Birth							
	Other		United States		Other		United States	
	Number	%	Number	%	Number	%	Number	%
1990	250,694	41.0	360,972	59.0	8,223	24.6	25,170	75.4
1991	261,443	42.9	347,785	57.1	8,972	27.2	24,049	72.8
1992	267,096	44.5	333,742	55.5	9,630	29.3	23,191	70.7
1993	261,979	44.8	322,504	55.2	9,757	30.3	22,492	69.7
1994	252,240	44.5	314,794	55.5	9,689	30.8	21,768	69.2
1995	245,175	44.5	306,051	55.5	9,541	31.7	20,568	68.3
1996	243,944	45.3	294,684	54.7	9,540	32.5	19,819	67.5
1997	235,456	44.9	288,718	55.1	9,176	32.4	19,143	67.6
1998	230,189	44.2	291,076	55.8	9,000	31.9	19,245	68.1
1999	231,701	44.7	286,372	55.3	9,146	32.2	19,251	67.8
2000	243,113	45.8	288,172	54.2	9,397	32.8	19,260	67.2

Source: California Department of Health Services, Birth Files.

# **MOTHER'S EDUCATION**

During the first half of the 1990's, San Bernardino County resident mothers were more likely to have twelve or more years of education than residents of California, as shown in Table 9. During the 1990's, the percentage of San Bernardino County mothers with a high school education decreased, then increased in the latter half of the decade. In 2000, 68% of San Bernardino County's mothers had twelve or more years of education, compared to 69% of California's mothers. The proportion of mothers with some college education (sixteen or more years) has consistently been lower in San Bernardino County than in California.

**Table 9**  
Live Births by Mother's Education  
California and San Bernardino County Residents, 1990-2000

	Mother's Residence											
	California						San Bernardino County					
	Mother's Education											
	12 years or more		16 years or more		Other		12 years or more		16 years or more		Other	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
1990	400,463	65.5	92,100	15.1	211,203	34.5	23,322	69.8	3,344	10.0	10,071	30.2
1991	392,799	64.5	92,703	15.2	216,429	35.5	22,450	68.0	3,272	9.9	10,571	32.0
1992	385,732	64.2	93,687	15.6	215,106	35.8	21,998	67.0	3,256	9.9	10,823	33.0
1993	376,002	64.3	92,540	15.8	208,481	35.7	21,030	65.2	3,130	9.7	11,219	34.8
1994	367,412	64.8	93,039	16.4	199,622	35.2	20,138	64.0	3,153	10.0	11,319	36.0
1995	360,476	65.4	93,434	17.0	190,750	34.6	19,623	65.2	3,139	10.4	10,486	34.8
1996	353,697	65.7	94,196	17.5	184,931	34.3	18,974	64.6	3,044	10.4	10,385	35.4
1997	350,458	66.9	97,051	18.5	173,716	33.1	18,519	65.4	2,940	10.4	9,800	34.6
1998	353,355	67.8	100,260	19.2	167,910	32.2	18,727	66.3	3,026	10.7	9,518	33.7
1999	355,262	68.6	104,331	20.1	162,811	31.4	19,264	67.8	3,374	11.9	9,133	32.2
2000	367,866	69.2	112,664	21.2	163,419	30.8	19,535	68.2	3,374	11.8	9,122	31.8

Source: California Department of Health Services, Birth Files.

**MOTHER'S MARITAL STATUS**

The proportion of newborns born to unmarried mothers was higher among San Bernardino County residents than among California residents in every year of the review period, and the difference appeared to increase in the latter half of the decade. In 2000, 38% of San Bernardino County's live births were to unmarried mothers, compared to 33% of California's.

**Table 10**  
Live Births by Mother's Marital Status  
California and San Bernardino County Residents, 1990-2000

	Mother's Residence											
	California						San Bernardino County					
	Mother's Marital Status											
	Married		Unknown		Unmarried		Married		Unknown		Unmarried	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
1990	419,377	68.6	0	0	192,289	31.4	22,651	67.8	0	0	10,742	32.2
1991	406,173	66.7	0	0	203,055	33.3	21,681	65.7	0	0	11,340	34.3
1992	395,509	65.8	0	0	205,329	34.2	21,199	64.6	0	0	11,622	35.4
1993	379,138	64.9	0	0	205,345	35.1	20,015	62.1	0	0	12,234	37.9
1994	365,278	64.4	0	0	201,756	35.6	19,095	60.7	0	0	12,362	39.3
1995	374,474	67.9	0	0	176,752	32.1	19,101	63.4	0	0	11,008	36.6
1996	369,689	68.6	0	0	168,939	31.4	18,668	63.6	0	0	10,691	36.4
1997	340,086	64.9	16,712	3.2	167,376	31.9	16,984	60.0	232	0.8	11,103	39.2
1998	350,201	67.2	457	0.1	170,607	32.7	17,087	60.5	18	0.1	11,140	39.4
1999	347,603	67.1	336	0.1	170,134	32.8	17,369	61.2	10	0.0	11,018	38.8
2000	357,336	67.3	150	0.0	173,799	32.7	17,670	61.7	8	0.0	10,979	38.3

Note: Prior to 1997, mother's marital status was determined by an inferential methodology based primarily on comparison of the surnames of the mother, father, child, and informant as listed on the birth certificate. Beginning in 1997, Assembly Bill 2680 required marital status to be collected electronically through the automated vital statistics system.

Source: California Department of Health Services, Birth Files.

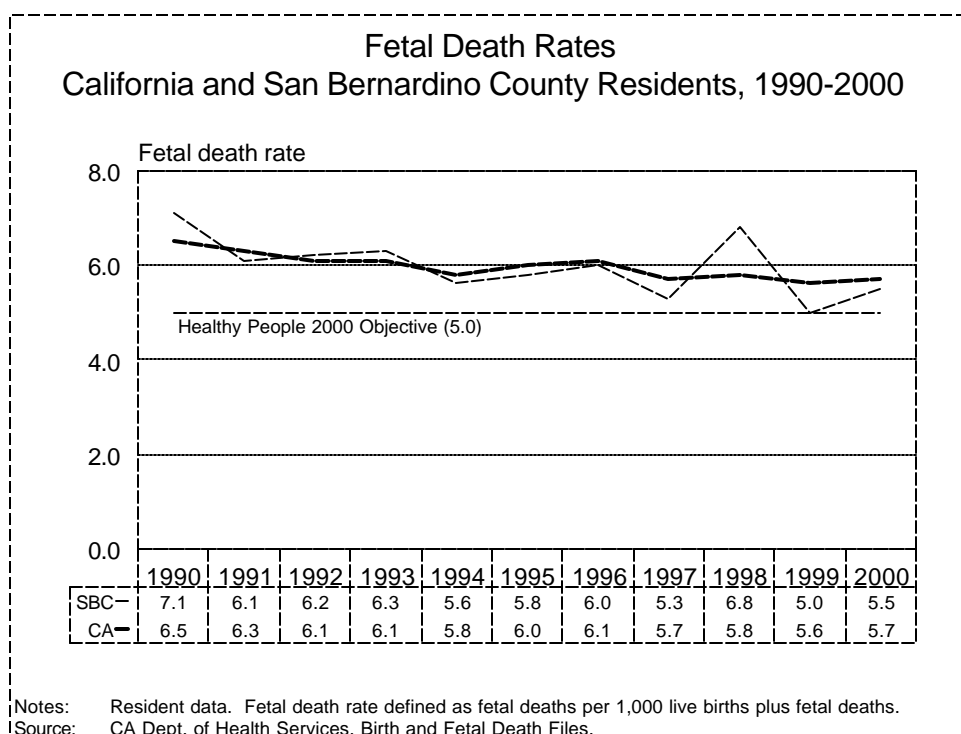
# FETAL DEATHS

Healthy People 2000 Objective: *Reduce the fetal death rate (20 or more weeks gestation) to no more than 5 per 1,000 live births plus fetal deaths.*

2000 Status: San Bernardino County 5.5  
California 5.7

Fetal deaths must be reported to the local registrar via a fetal death certificate if the fetus was of 20 weeks or more gestational age. The fetal death rate is defined as the number of fetal deaths per 1,000 live births plus fetal deaths. The number of fetal deaths and fetal death rates for California and San Bernardino County are shown in Table 11 for 1990 through 2000.

The fetal death rates for San Bernardino County and California were similar over most of the eleven year review period, as shown in Figure 23. The County rate was 23 percent lower in 2000 than 1990, while the State rate decreased 12 percent. San Bernardino County met the HP 2000 objective for the single year 1999, while the State has not yet achieved the objective.



**Figure 23**

**Table 11**  
Fetal Deaths and Fetal Death Rates  
California and San Bernardino County Residents, 1990-2000

Year	California		San Bernardino County	
	Fetal Deaths	Fetal Death Rate	Fetal Deaths	Fetal Death Rate
1990	3,989	6.5	233	6.9
1991	3,834	6.3	196	5.9
1992	3,704	6.1	201	6.1
1993	3,574	6.1	200	6.2
1994	3,299	5.8	172	5.4
1995	3,355	6.0	170	5.6
1996	3,330	6.1	172	5.8
1997	2,996	5.7	142	5.0
1998	3,053	5.8	183	6.4
1999	2,927	5.6	140	4.9
2000	3,046	5.7	153	5.3

Note: Fetal death rate defined as fetal deaths per 1,000 live births plus fetal deaths.  
Source: California Department of Health Services, Birth and Fetal Death Files.



## **INFANT MORTALITY**

In this section of the report infant mortality rates are reviewed by age of infant (i.e. neonatal and post-neonatal) and race/ethnicity of mother, for the period 1990 to 1999. An infant death is a death occurring during the first year of life. A neonatal death is a death occurring during the first 27 days of life, and a postneonatal death is a death occurring between the 28th day of life and the first birthday. Infant mortality rate is defined as the number of infant deaths per 1,000 live births.

For this report infant mortality rates were derived from CA DHS birth cohort files, which consist of linked birth and death records. The cohort files contain all information found on the birth certificate, including race/ethnicity of the mother, as well as whether the infant survived to age one year and at what age death occurred. The CA DHS updates the cohort files as new information is obtained, so that counts derived from the cohort files may not exactly match counts from other sources including CA DHS birth files. The CA DHS did not produce a birth cohort file for 1998.

In the following pages, infant deaths and infant mortality rates are shown in Table 12 (overall infant mortality), Table 13 (neonatal mortality), and Table 14 (postneonatal mortality). Counts and rates for California and San Bernardino County are shown in each table with comparison among race/ethnic groups. Figure 24 compares overall infant mortality rates for San Bernardino County and California, and Figures 28 and 32 present neonatal and postneonatal rates for the County and the State. Figures 25, 29, and 33 present overall, neonatal, and postneonatal infant mortality rate for infants born to Black mothers; Figures 26, 30, and 34 for infants born to Hispanic mothers; and Figures 27, 31, and 35 for infants born to White mothers.

## Infant Mortality

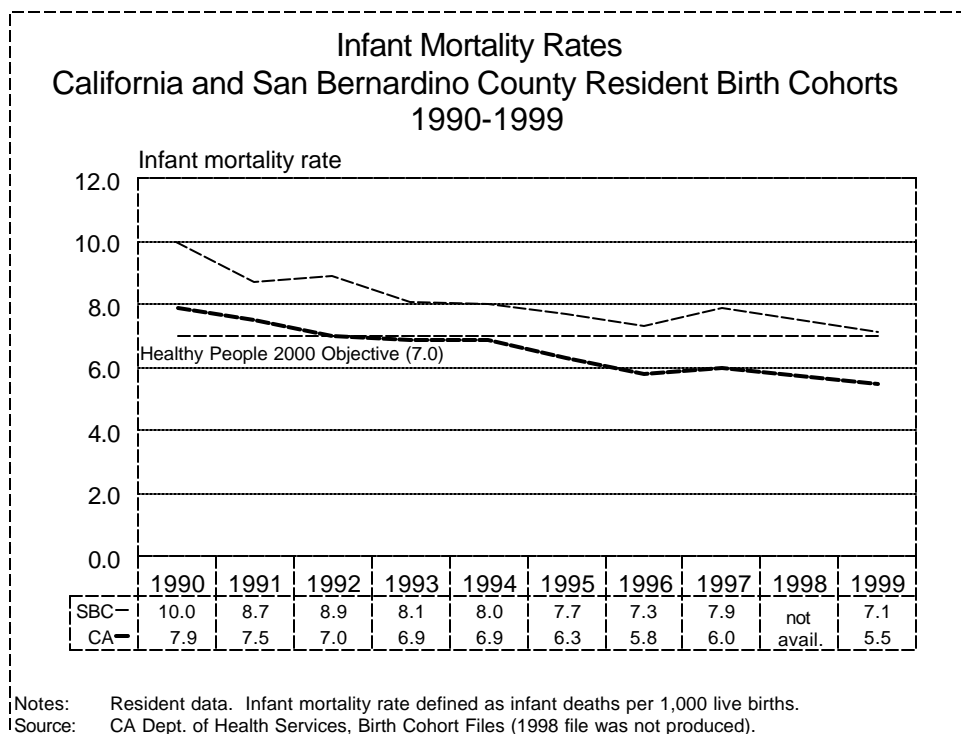
Healthy People 2000 Objective: *Reduce the infant mortality rate to no more than 7.0 per 1,000 live births.*

1999 Status: San Bernardino County 7.1  
California 5.5

San Bernardino County's infant mortality rate was higher than the State's each year of the ten year review period, as shown in Figure 24. California's rate decreased from 7.9 infant deaths per 1,000 live births in 1990 to 5.5 in 1999, a 30 percent decrease. Over the same period, San Bernardino County's rate decreased 29 percent, from 10.0 to 7.1.

In 1992 the State achieved the Healthy People 2000 Objective, and the rate for the State has remained below the objective in subsequent years. The ten year trend for both the State and San Bernardino County is clearly downward, but the County has yet to achieve the objective.

San Bernardino County's three-year (1996-1997, 1999) infant mortality rate is displayed geographically by ZIP code in Figure 25. ZIP codes with the highest infant mortality rate were located in the valley communities of San Bernardino, Colton, and Grand Terrace; and the desert communities of Apple Valley, Victorville, Barstow, Yucca Valley, and Twentynine Palms.



**Figure 24**

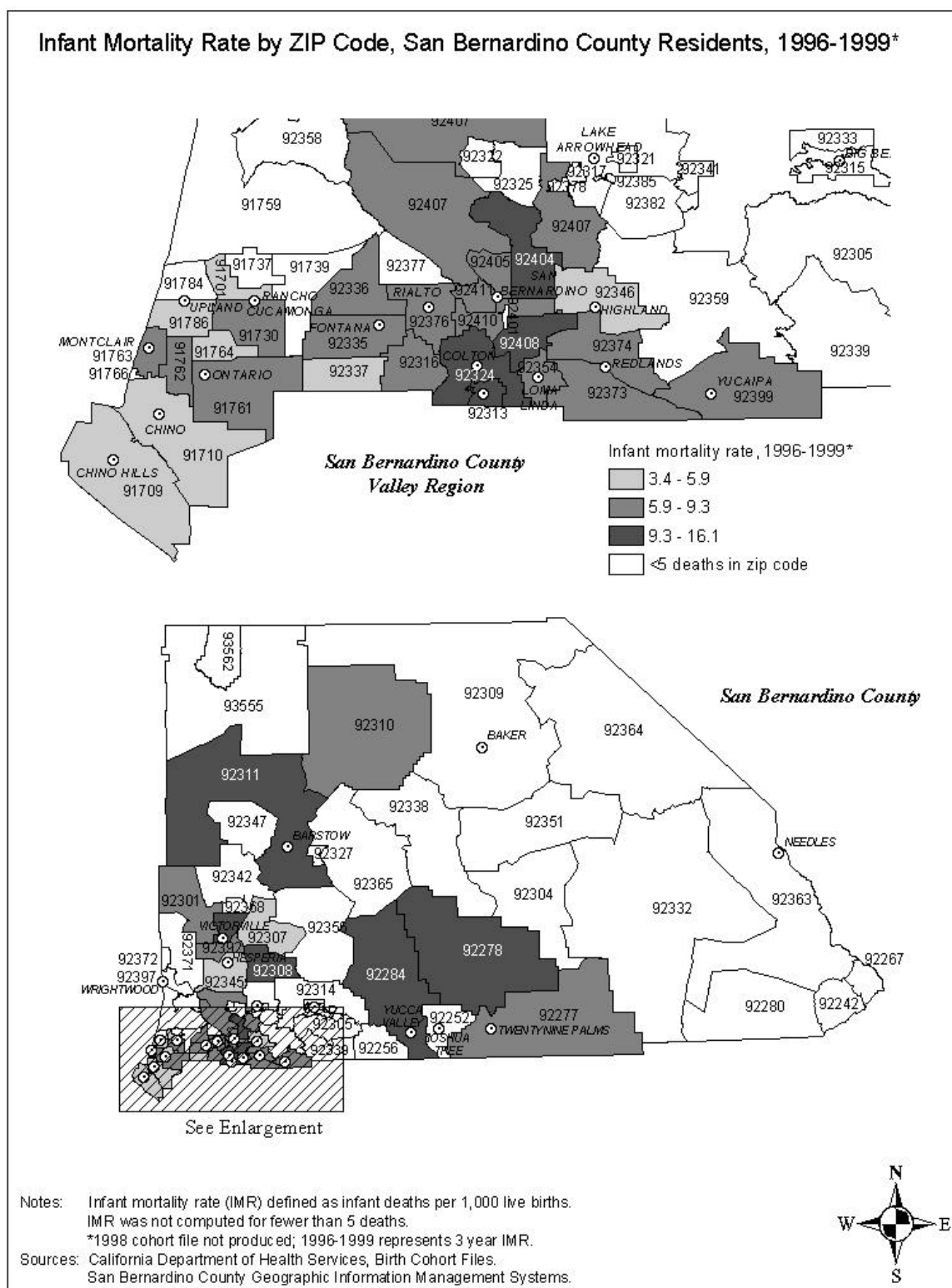


Figure 25

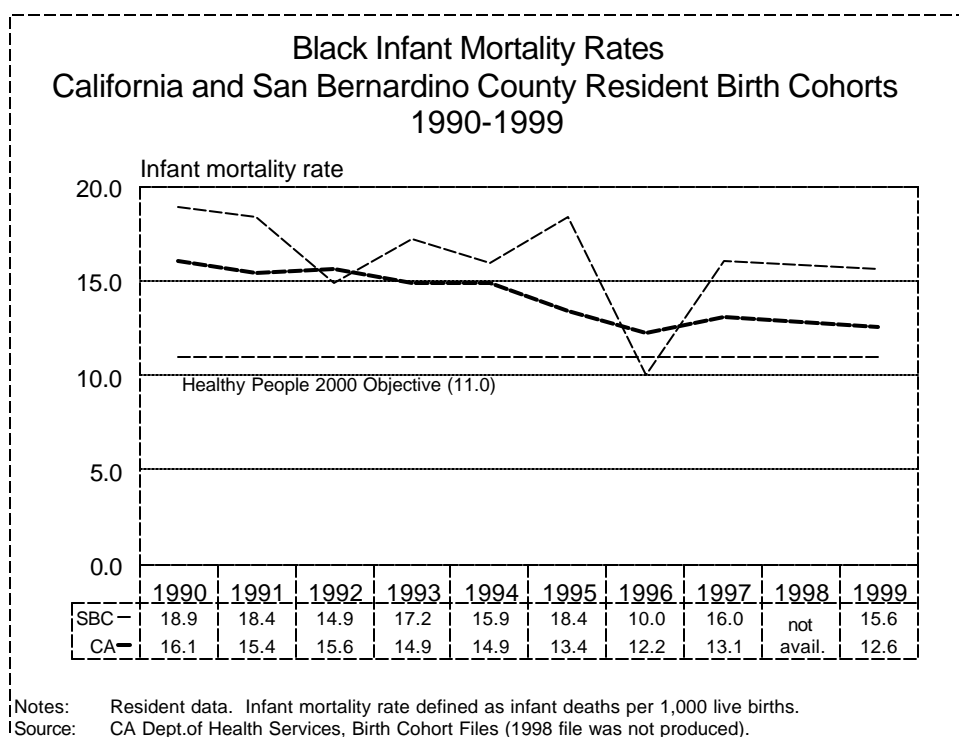
## Infant Mortality by Race/Ethnicity of Mother

Healthy People 2000 Objective: *Reduce the infant mortality rate among blacks to no more than 11 per 1,000 live births.*

1999 Status: San Bernardino County 15.6  
California 12.6

Apart from the single year exception discussed below, the Healthy People 2000 Objective for black infant mortality rate has not been met by either California or San Bernardino County based on a review of the data presented in Table 12. San Bernardino County's black infant mortality rate decreased 17 percent from 1990 to 1999, while the State's rate decreased 22 percent. Relatively small numbers of events in the County result in an erratic pattern rather than a clear trend, as shown in Figure 26.

San Bernardino County's black infant mortality rate met the HP 2000 objective in the single year 1996. Of the 1996 birth cohort, 27 San Bernardino County resident black infants died, compared to an average of 49 black infant deaths per year in the rest of the review period. No explanation for the large decrease in black infant deaths in this single year was found during a recent investigation.



**Figure 26**

Both the County and State infant mortality rate among Hispanics decreased 29 percent from 1990 to 1999 (Figure 27). The County infant mortality rate among Hispanics exceeded the State rate in all but one of these years. From 1990 to 1999, the rate among whites decreased 36 and 29 percent for California and San Bernardino County, respectively (Figure 28). No HP2000 objectives were established for white or Hispanic infant mortality rates.

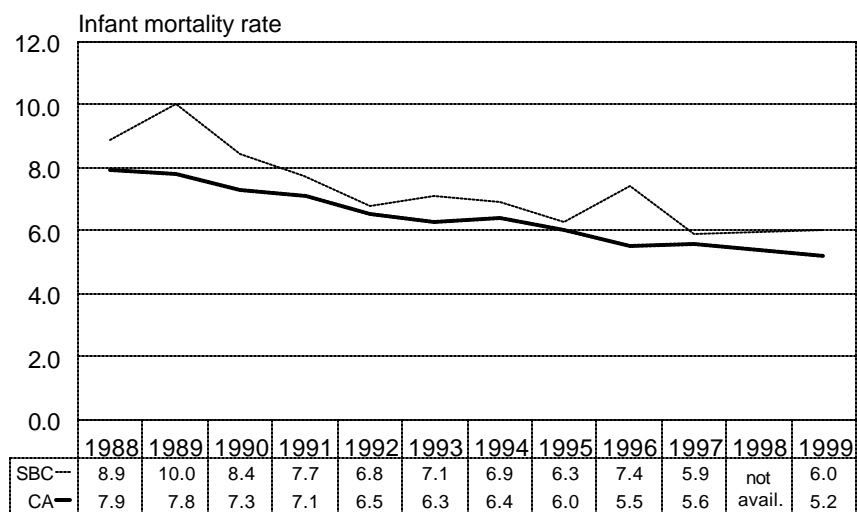
**Table 12**  
Infant Deaths and Infant Mortality Rates by Race/Ethnicity of Mother  
California and San Bernardino County Residents, 1990-1999

Year	Infant Deaths					Infant Mortality Rate				
	Total	Black	Hispanic	White	Other	Total	Black	Hispanic	White	Other
<b>California</b>										
1990	4,859	777	1,797	1,857	428	7.9	16.1	7.3	7.2	6.9
1991	4,555	723	1,822	1,620	390	7.5	15.4	7.1	6.7	6.3
1992	4,235	709	1,703	1,414	409	7.0	15.6	6.5	6.2	6.4
1993	4,041	661	1,667	1,331	382	6.9	14.9	6.3	6.1	6.1
1994	3,960	626	1,655	1,312	367	6.9	14.9	6.4	6.4	5.8
1995	3,521	530	1,531	1,117	343	6.3	13.4	6.0	5.7	5.5
1996	3,167	458	1,407	974	328	5.8	12.2	5.5	5.2	5.3
1997	3,152	477	1,412	947	316	6.0	13.1	5.6	5.3	5.1
1998	<i>not available</i>									
1999	2,842	430	1,301	794	317	5.5	12.6	5.2	4.6	5.1
<b>San Bernardino County</b>										
1990	333	54	93	164	22	10.0	18.9	8.4	9.1	13.9
1991	288	57	97	119	15	8.7	18.4	7.7	7.6	8.7
1992	291	47	89	121	34	8.9	14.9	6.8	8.2	18.7
1993	262	53	98	96	15	8.1	17.2	7.1	7.0	8.3
1994	253	46	94	94	19	8.0	15.9	6.9	7.5	7.4
1995	233	52	88	81	12	7.7	18.4	6.3	7.0	6.6
1996	217	27	107	69	14	7.3	10.0	7.4	6.4	8.3
1997	224	43	84	85	12	7.9	16.0	5.9	8.6	7.6
1998	<i>not available</i>									
1999	203	42	88	62	11	7.1	15.6	6.0	6.5	7.1

Note: Rates calculated for fewer than 20 events, shown in *italics*, are unreliable and should be interpreted with caution.

Source: California Department of Health Services, Birth Cohort Files (1998 file was not produced).

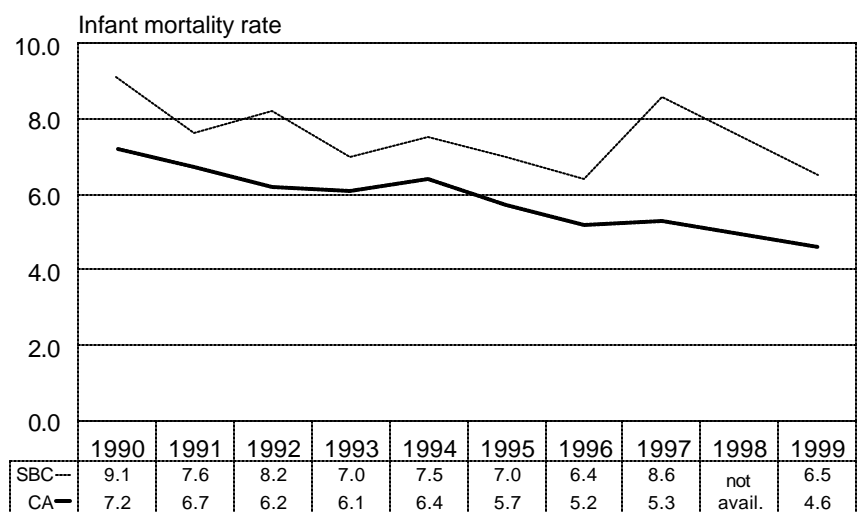
### Hispanic Infant Mortality Rates California and San Bernardino County, Birth Cohorts, 1988-1999



Notes: Resident data. Infant mortality rate defined as infant deaths per 1,000 live births.  
Source: CA Dept. of Health Services, Birth Cohort Files (1998 file was not produced).

**Figure 27**

### White Infant Mortality Rates California and San Bernardino County Resident Birth Cohorts 1990-1999



Notes: Resident data. Infant mortality rate defined as infant deaths per 1,000 live births.  
Source: CA Dept. of Health Services, Birth Cohort Files (1998 file was not produced).

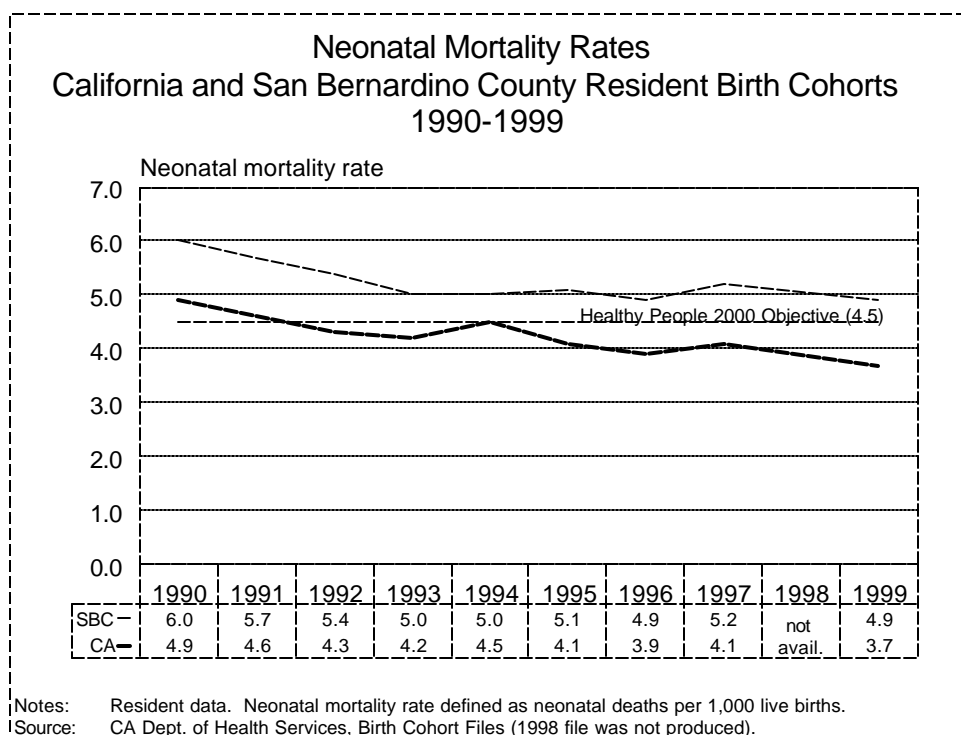
**Figure 28**

## Neonatal Mortality

Healthy People 2000 Objective: *Reduce the neonatal mortality rate to no more than 4.5 per 1,000 live births.*

1999 Status: San Bernardino County 4.9  
California 3.7

Both the State and the County experienced downward trends in neonatal mortality between 1990 and 1999 (Figure 29). During the ten-year review period California's and San Bernardino County's neonatal mortality rates dropped 24 and 18 percent, respectively. San Bernardino County's rate was higher than the State rate in each of the years reviewed, and the County has yet to achieve the Healthy People 2000 Objective. The State rate has met the objective every year since 1992.



**Figure 29**

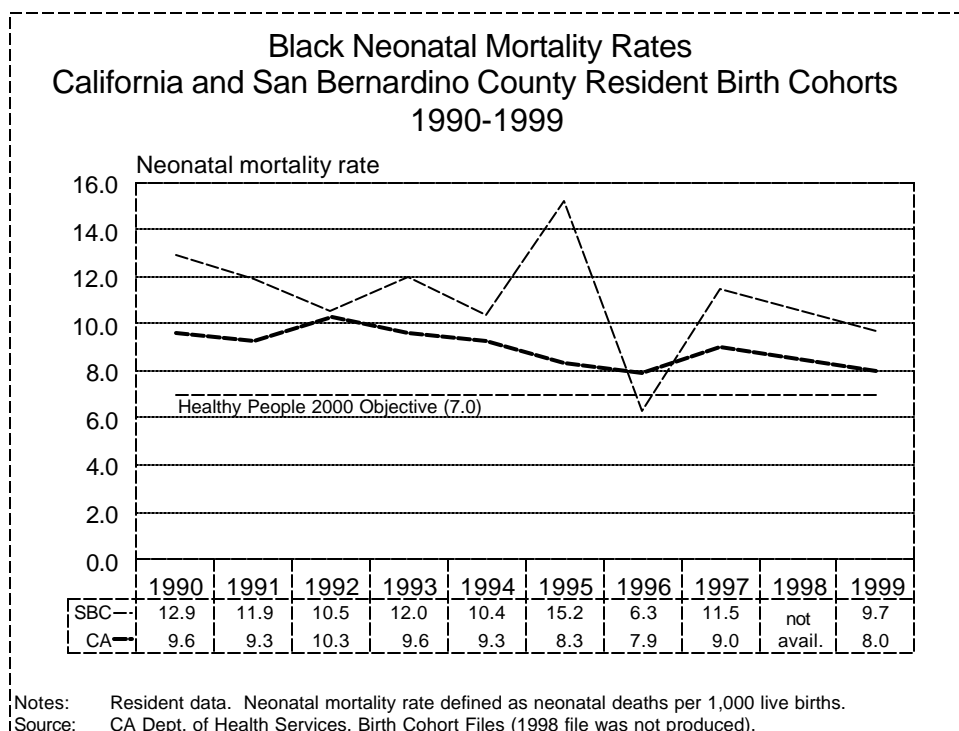
## Neonatal Mortality by Race/Ethnicity of Mother

Healthy People 2000 Objective: *Reduce the black neonatal mortality rate to no more than 7.0 per 1,000 live births.*

1999 Status: San Bernardino County 9.7  
California 8.0

The relatively small number of neonatal deaths at the County level was reflected in the variability of the rates for all three race/ethnicity groups (Figures 30 through 32). The highest black neonatal mortality rate for San Bernardino County during the review period was in 1995 (Figure 30). No trend is obvious for the County black rates. The State rate, however, appears to be declining.

The Hispanic neonatal infant mortality rate for San Bernardino County and California is presented in Figure 31. The State clearly experienced a downward trend over the review period, while the County's rates vary too much to draw any conclusion regarding a trend. The white neonatal rates for the County and State are shown in Figure 32. Again, a downward trend in the rate is obvious for California but not for San Bernardino County. Neonatal deaths and mortality rates by race/ethnicity are shown in Table 13. No HP2000 objectives were established for white or Hispanic neonatal infant mortality rates.



**Figure 30**



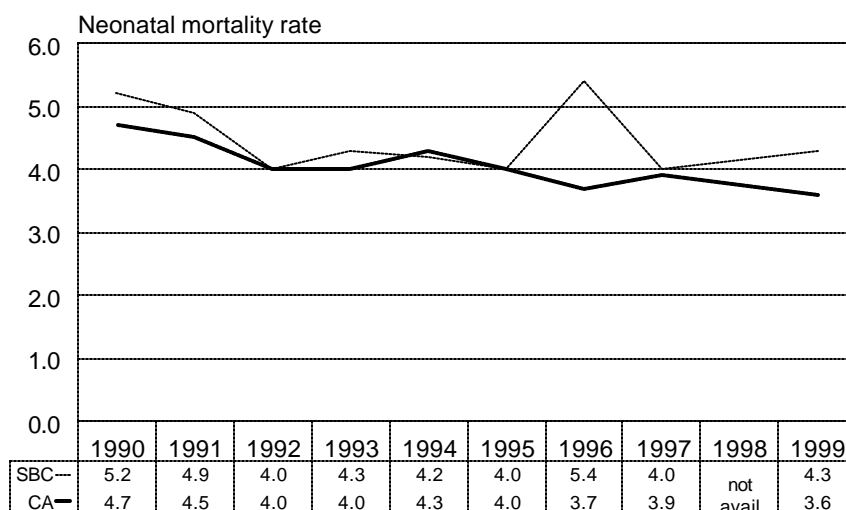
**Table 13**  
Neonatal Deaths and Neonatal Mortality Rates by Race/Ethnicity of Mother  
California and San Bernardino County Residents, 1990-1999

Year	Neonatal Deaths					Neonatal Mortality Rate				
	Total	Black	Hispanic	White	Other	Total	Black	Hispanic	White	Other
<b>California</b>										
1990	2,989	465	1,146	1,131	247	4.9	9.6	4.7	4.4	4.0
1991	2,817	434	1,164	987	232	4.6	9.3	4.5	4.1	3.7
1992	2,603	469	1,060	829	245	4.3	10.3	4.0	3.6	3.9
1993	2,493	425	1,056	780	232	4.2	9.6	4.0	3.6	3.7
1994	2,554	392	1,119	820	223	4.5	9.3	4.3	4.0	3.5
1995	2,254	329	1,011	688	226	4.1	8.3	4.0	3.5	3.6
1996	2,108	295	946	640	227	3.9	7.9	3.7	3.4	3.7
1997	2,140	327	980	634	199	4.1	9.0	3.9	3.6	3.2
1998	<i>not available</i>									
1999	1,929	274	901	543	211	3.7	8.0	3.6	3.2	3.4
<b>San Bernardino County</b>										
1990	202	37	57	95	13	6.0	12.9	5.2	5.3	8.2
1991	188	37	62	76	13	5.7	11.9	4.9	4.9	7.6
1992	176	33	53	64	26	5.4	10.5	4.0	4.3	14.3
1993	163	37	59	55	12	5.0	12.0	4.3	4.0	6.7
1994	158	30	57	57	14	5.0	10.4	4.2	4.5	5.4
1995	154	43	56	47	8	5.1	15.2	4.0	4.1	4.4
1996	145	17	78	41	9	4.9	6.3	5.4	3.8	5.3
1997	149	31	57	54	7	5.2	11.5	4.0	5.5	4.4
1998	<i>not available</i>									
1999	140	26	63	46	5	4.9	9.7	4.3	4.8	3.2

Note: Rates calculated for fewer than 20 events, shown in *italics*, are unreliable and should be interpreted with caution.

Source: California Department of Health Services, Birth Cohort Files (1998 file was not produced).

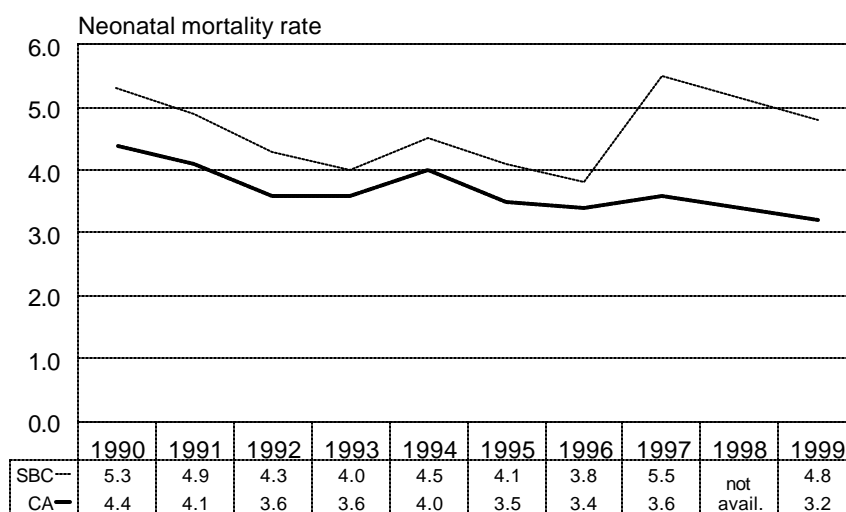
### Hispanic Neonatal Mortality Rates California and San Bernardino County Resident Birth Cohorts 1990-1999



Notes: Resident data. Neonatal mortality rate defined as neonatal deaths per 1,000 live births.  
Source: CA Dept. of Health Services, Birth Cohort Files (1998 file was not produced).

**Figure 31**

### White Neonatal Mortality Rates California and San Bernardino County Resident Birth Cohorts 1990-1999



Notes: Resident data. Neonatal mortality rate defined as neonatal deaths per 1,000 live births.  
Source: CA Dept. of Health Services, Birth Cohort Files (1998 file was not produced).

**Figure 32**

## Neonatal to Fetal Death Ratios

The hypothesis that nonviable live births are more likely to be reported as live births and subsequent neonatal infant deaths in San Bernardino County than in the remainder of California is currently under investigation. Although a birth event should be recorded as a live birth if the infant shows any sign of life, in practice some clearly nonviable births (e.g. extremely low birthweight, extremely premature) actually may be reported as fetal deaths. It has been hypothesized that there may be a difference in reporting between San Bernardino County and the remainder of the State. To the extent that this practice difference actually exists, it accounts for some of the apparently higher infant mortality rate in San Bernardino County.

One way to measure this practice is to compare the ratio of neonatal infant deaths to fetal deaths between jurisdictions. Table 14 compares the neonatal to fetal death ratio, defined as neonatal infant deaths divided by fetal deaths, for San Bernardino County and the remainder of California. The table shows that San Bernardino County's neonatal to fetal death ratio is higher than the ratio for the remainder of State, indicating that San Bernardino County experiences relatively fewer fetal deaths and more neonatal infant deaths than California. The fetal death rates and neonatal infant death rates shown in Tables 11 and 13 respectively are consistent with this finding: fetal death rates are generally lower in San Bernardino County than California, and neonatal death rates are higher in the County than in California.

**Table 14**  
Fetal Deaths, Neonatal Infant Deaths, and Neonatal to Fetal Death Ratio  
San Bernardino County and Remainder of California, 1989-1999

Year	San Bernardino County			California excluding San Bernardino County		
	Fetal Deaths	Neonatal Deaths	Neonatal to Fetal Death Ratio	Fetal Deaths	Neonatal Deaths	Neonatal to Fetal Death Ratio
1989	205	201	0.98	3,619	2,802	0.77
1990	233	202	0.87	3,756	2,787	0.74
1991	196	188	0.96	3,638	2,629	0.72
1992	201	176	0.88	3,503	2,427	0.69
1993	200	163	0.82	3,374	2,330	0.69
1994	172	158	0.92	3,127	2,396	0.77
1995	170	154	0.91	3,185	2,100	0.66
1996	172	145	0.84	3,158	1,963	0.62
1997	142	149	1.05	2,854	1,991	0.70
1998	183	<i>not available</i>		2,870	<i>not available</i>	
1999	140	140	1.00	2,787	1,789	0.64

Notes: Neonatal to fetal death ratio defined as [neonatal infant deaths]/[fetal deaths].

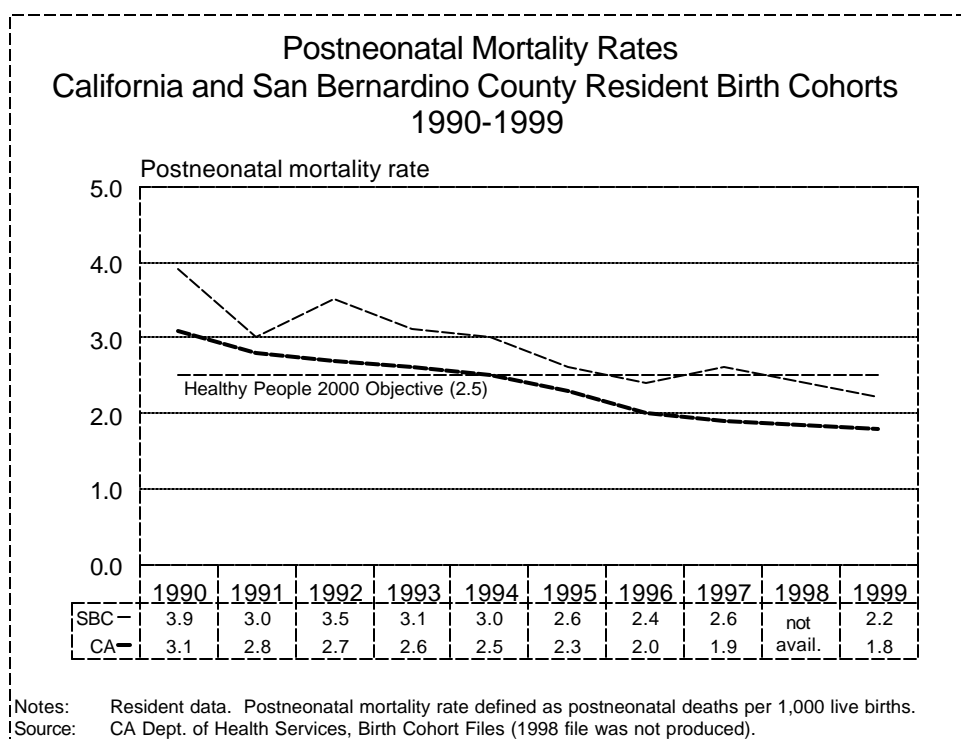
Source: California Department of Health Services, Birth Cohort and Fetal Death Files.

## Postneonatal Mortality

Healthy People 2000 Objective: *Reduce the postneonatal mortality rate to no more than 2.5 per 1,000 live births.*

1999 Status: San Bernardino County 2.2  
California 1.8

San Bernardino County experienced higher postneonatal mortality rates than the State of California each year of the review period, as shown in Figure 33. California's rates have met the Healthy People 2000 Objective since 1994. The County trend is clearly decreasing, with the 1999 rate of 2.2 44 percent below the 1990 rate. To date, the County has met the objective in two years, 1996 and 1999.



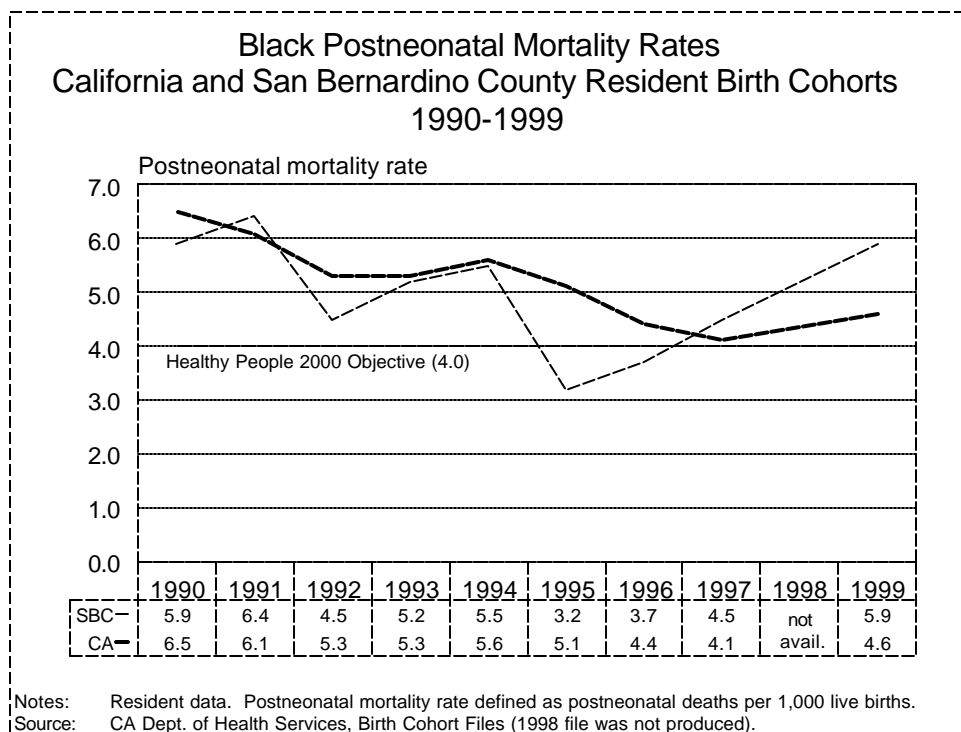
**Figure 33**

## Postneonatal Mortality by Race/Ethnicity of Mother

Healthy People 2000 Objective:	<i>Reduce postneonatal mortality among blacks to no more than 4.0 per 1,000 live births.</i>	
1999 Status:	San Bernardino County 5.9	
	California	4.6

During the review period the San Bernardino County postneonatal mortality rate for blacks varied from a low of 3.2 in 1995 to a high of 5.9 in both 1990 and 1999 (Figure 34). The rates for most years are considered unreliable due to the relatively small number of deaths each year, as shown in Table 15. The State rate was much more stable and decreased for most of the review period; between 1990 and 1999, the State rate decreased 29 percent. California did not meet the HP 2000 objective during the review period; the County met the objective in the single year 1995.

San Bernardino County's and California's postneonatal mortality rate among Hispanics and whites decreased over the review period (Figures 35 and 36). The County rates were higher than the State rates for all of the review period for both Hispanics and whites. Postneonatal deaths and mortality rates by mother's race/ethnicity are presented in Table 15. No HP2000 objectives were established for white or



Hispanic postneonatal infant mortality rates.

**Figure 34**

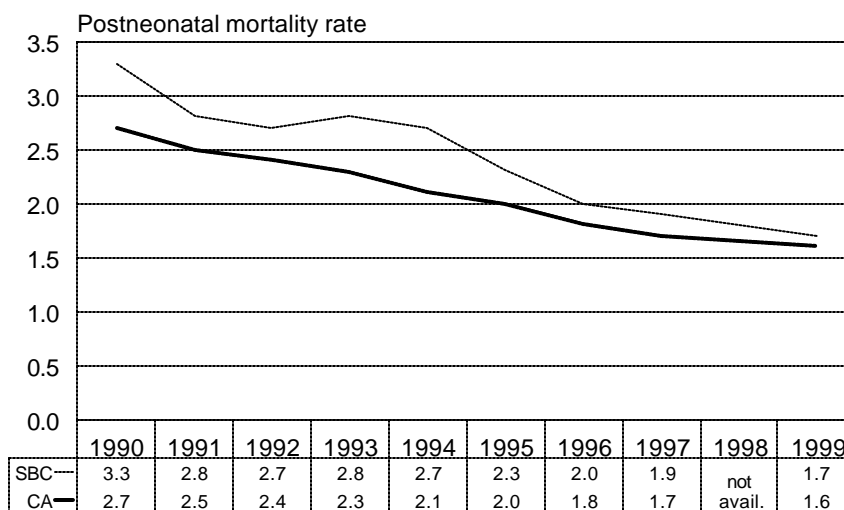
**Table 15**  
Postneonatal Deaths and Postneonatal Mortality Rates by Race/Ethnicity of Mother  
California and San Bernardino County Residents, 1990-1999

Year	Postneonatal Deaths					Postneonatal Mortality Rate				
	Total	Black	Hispanic	White	Other	Total	Black	Hispanic	White	Other
<b>California</b>										
1990	1,870	312	651	726	181	3.1	6.5	2.7	2.8	2.9
1991	1,726	288	656	624	158	2.8	6.1	2.5	2.6	2.5
1992	1,626	240	641	582	163	2.7	5.3	2.4	2.5	2.6
1993	1,548	236	611	551	150	2.6	5.3	2.3	2.5	2.4
1994	1,406	234	536	492	144	2.5	5.6	2.1	2.4	2.3
1995	1,267	201	520	429	117	2.3	5.1	2.0	2.2	1.9
1996	1,059	163	461	334	101	2.0	4.4	1.8	1.8	1.6
1997	1,012	150	432	313	117	1.9	4.1	1.7	1.8	1.9
1998	<i>not available</i>									
1999	913	156	400	251	106	1.8	4.6	1.6	1.5	1.7
<b>San Bernardino County</b>										
1990	131	17	36	69	9	3.9	5.9	3.3	3.8	5.7
1991	100	20	35	43	2	3.0	6.4	2.8	2.7	1.2
1992	114	14	35	57	8	3.5	4.5	2.7	3.9	4.4
1993	99	16	39	41	3	3.1	5.2	2.8	3.0	1.7
1994	95	16	37	37	5	3.0	5.5	2.7	2.9	1.9
1995	79	9	32	34	4	2.6	3.2	2.3	2.9	2.2
1996	72	10	29	28	5	2.4	3.7	2.0	2.6	3.0
1997	75	12	27	31	5	2.6	4.5	1.9	3.1	3.2
1998	<i>not available</i>									
1999	63	16	25	16	6	2.2	5.9	1.7	1.7	3.8

Note: Rates calculated for fewer than 20 events, shown in *italics*, are unreliable and should be interpreted with caution.

Source: California Department of Health Services, Birth Cohort Files (1998 file was not produced).

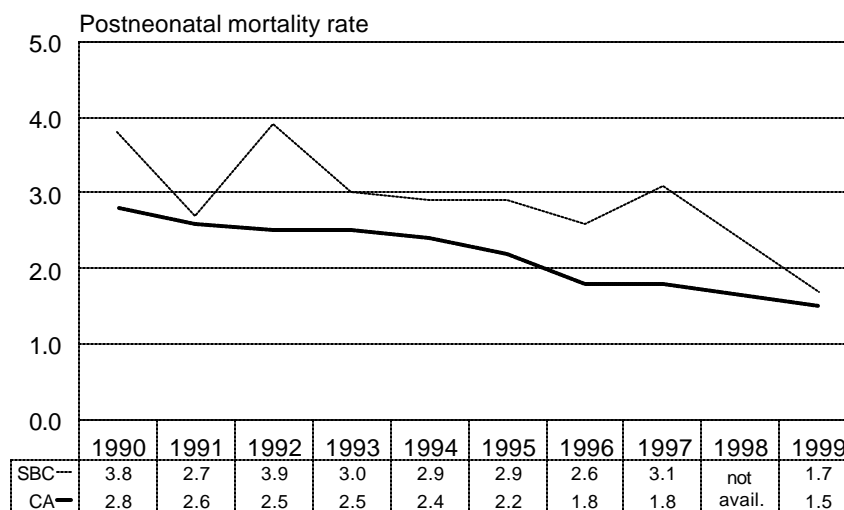
### Hispanic Postneonatal Mortality Rates California and San Bernardino County Resident Birth Cohorts 1990-1999



Notes: Resident data. Postneonatal mortality rate defined as postneonatal deaths per 1,000 live births.  
Source: CA Dept. of Health Services, Birth Cohort Files (1998 file was not produced).

**Figure 35**

### White Postneonatal Mortality Rates California and San Bernardino County Resident Birth Cohorts 1990-1999



Notes: Resident data. Postneonatal mortality rate defined as postneonatal deaths per 1,000 live births.  
Source: CA Dept. of Health Services, Birth Cohort Files (1998 file was not produced).

**Figure 36**

## APPENDIX A. GLOSSARY OF TERMS

Birthweight	The weight of the infant in grams at the time of birth or fetal death.
Childbearing age	Women 15-44 years of age.
Cohort	A group of people born in the same period.
Fetal death	A death prior to the complete expulsion or extraction from its mother of a product of conception (irrespective of the duration of pregnancy); the death is indicated by the fact that after such separation, the fetus does not breathe or show any other evidence of life such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles. This definition was promulgated by the World Health Organization in 1950 and is set forth in the California Administrative Code, Title 17, Chapter 1, Article 3. If the fetus is of 20 weeks or more gestational age, the death must be registered with the local registrar.
Infant death	A death occurring during the first year of life.
Live birth	The complete expulsion or extraction from its mother of a product of conception (irrespective of the duration of pregnancy) which, after such separation, breathes or shows any other evidence of life such as the beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached. This definition was promulgated by the World Health Organization in 1950 and is set forth in the California Administrative Code, Title 17, Chapter 1, Article 3.
Low birthweight	A live birth or fetal death weighing less than 2,500 grams (5 pounds, 8 ounces).
Neonatal death	A death occurring during the first 27 days of life.
Place of residence	Where a person lives or maintains legal residency. For live births and fetal deaths, the mother's residence is used.
Postneonatal death	A death occurring between the 28 <sup>th</sup> day and the end of the first year of life.
Very low birthweight	A live birth or fetal death weighing less than 1,500 grams (3 pounds, 5 ounces).



**APPENDIX B. RATES AND RATIOS**

Age-specific birth rate	=	$\frac{\text{number of live births to women in specified age group} \times 1000}{\text{estimated female population in specified age group}}$
Crude birth rate (live birth rate)	=	$\frac{\text{number of live births}}{\text{estimated total population}} \times 1000$
Fetal death ratio	=	$\frac{\text{number of reportable fetal deaths} \times 1000}{\text{total number of live births}}$
General fertility rate	=	$\frac{\text{number of live births}}{\text{Estimated female population aged 15-44 years}} \times 1000$
Infant mortality rate	=	$\frac{\text{number of deaths under 1 year of age} \times 1000}{\text{number of live births}}$
Neonatal mortality rate	=	$\frac{\text{number of deaths under 28 days of age} \times 1000}{\text{number of live births}}$
Neonatal to fetal death ratio	=	$\frac{\text{number of neonatal infant deaths}}{\text{number of fetal deaths}}$
Postneonatal mortality rate	=	$\frac{\text{number of deaths 28 days to 1 year of age} \times 1000}{\text{number of live births}}$
Cohort infant mortality rate	=	$\frac{\text{number of deaths under 1 year of age of members of the cohort} \times 1000}{\text{number of live births in the cohort}}$

APPENDIX C. SAN BERNARDINO COUNTY RESIDENT LIVE BIRTHS BY MOTHER'S RACE/ETHNICITY, 1990-2000

Mother's Race/Ethnicity		1990	1991	1992	1993	1994*	1995	1996	1997	1998	1999	2000**
All Race/Ethnicities	Number	33,393	33,021	32,821	32,249	31,457	30,109	29,359	28,319	28,245	28,397	28,657
	Percent	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
American Indian, Eskimo, Aleut	Number	153	125	173	161	164	146	175	141	147	144	147
	Percent	0.5	0.4	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5
Asian-Cambodian	Number	64	68	73	77	78	65	59	53	39	50	55
	Percent	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2
Asian-Chinese	Number	138	158	193	166	174	176	153	144	171	149	188
	Percent	0.4	0.5	0.6	0.5	0.6	0.6	0.5	0.5	0.6	0.5	0.7
Asian-Indian	Number	80	87	82	98	100	104	106	101	113	113	114
	Percent	0.2	0.3	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4
Asian-Japanese	Number	75	71	75	76	84	68	68	61	69	49	52
	Percent	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2
Asian-Korean	Number	134	137	127	116	114	108	100	91	89	85	94
	Percent	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3
Asian-Laotian	Number	15	16	18	19	17	10	10	23	10	12	11
	Percent	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0
Asian-Other	Number	55	56	60	76	122	176	161	187	173	176	193
	Percent	0.2	0.2	0.2	0.2	0.4	0.6	0.5	0.7	0.6	0.6	0.7
Asian-Thai	Number	39	43	30	42	32	29	27	24	21	20	23
	Percent	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Asian-Vietnamese	Number	134	163	197	196	198	181	179	171	133	162	201

NOTES: ALL RACE/ETHNIC CATEGORIES EXCEPT "HISPANIC" EXCLUDE PERSONS OF HISPANIC ORIGIN.

\*SEE DISCUSSION ON PAGE 11 REGARDING RACE REPORTING ANOMALIES IN 1994.

\*\*RACE REPORTING ON THE CALIFORNIA BIRTH CERTIFICATE CHANGED BEGINNING IN 2000.

SOURCE: CALIFORNIA DEPARTMENT OF HEALTH SERVICES, BIRTH RECORDS.

APPENDIX C. SAN BERNARDINO COUNTY RESIDENT LIVE BIRTHS BY MOTHER'S RACE/ETHNICITY, 1990-2000

Mother's Race/Ethnicity		1990	1991	1992	1993	1994*	1995	1996	1997	1998	1999	2000**
	Percent	0.4	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.7
Black	Number	2,859	3,103	3,148	3,044	2,877	2,791	2,673	2,656	2,744	2,691	2,680
	Percent	8.6	9.4	9.6	9.4	9.1	9.3	9.1	9.4	9.7	9.5	9.4
Filipino	Number	405	429	431	419	439	416	408	408	388	402	417
	Percent	1.2	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4	1.5
Guamanian	Number	13	14	9	15	18	7	19	11	15	14	13
	Percent	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0
Hawaiian	Number	29	32	26	20	30	22	26	20	21	22	35
	Percent	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Hispanic	Number	11,027	12,541	13,114	13,751	13,542	13,994	14,322	14,248	14,339	14,626	15,093
	Percent	33.0	38.0	40.0	42.6	43.0	46.5	48.8	50.3	50.8	51.5	52.7
Other	Number	21	17	29	19	13	9	14	16	10	20	6
	Percent	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.0
Pacific Islander-Other	Number	69	114	116	92	60	56	56	47	45	55	44
	Percent	0.2	0.3	0.4	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Samoan	Number	28	34	45	43	45	46	38	37	48	40	52
	Percent	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.2
Unknown	Number	130	152	134	161	875	179	76	35	55	46	51
	Percent	0.4	0.5	0.4	0.5	2.8	0.6	0.3	0.1	0.2	0.2	0.2
White	Number	17,925	15,661	14,741	13,658	12,475	11,526	10,689	9,845	9,615	9,521	9,188
	Percent	53.7	47.4	44.9	42.4	39.7	38.3	36.4	34.8	34.0	33.5	32.1

NOTES: ALL RACE/ETHNIC CATEGORIES EXCEPT "HISPANIC" EXCLUDE PERSONS OF HISPANIC ORIGIN.

\*SEE DISCUSSION ON PAGE 11 REGARDING RACE REPORTING ANOMALIES IN 1994.

\*\*RACE REPORTING ON THE CALIFORNIA BIRTH CERTIFICATE CHANGED BEGINNING IN 2000.

SOURCE: CALIFORNIA DEPARTMENT OF HEALTH SERVICES, BIRTH RECORDS.

SAN BERNARDINO COUNTY LIVE BIRTHS 1990-2000

APPENDIX D. SAN BERNARDINO COUNTY RESIDENT LIVE BIRTHS BY SELECTED CHARACTERISTICS AND RESIDENCE ZIP CODE, 1998-2000

MOTHER'S RESIDENCE ZIP CODE	TOTAL BIRTHS	MOTHER'S RACE/ETHNICITY				PERCENT MOTHERS <19 YEARS	LOW BIRTHWEIGHT		PERCENT FIRST TRIMESTER PRENATAL CARE	PERCENT MEDI-CAL FUNDED PRENATAL CARE
		PERCENT BLACK	PERCENT HISPANIC	PERCENT OTHER RACE	PERCENT WHITE		PERCENT <2500 GM	PERCENT <1500 GM		
San Bernardino County	85,299	9.5	51.7	5.6	33.2	14.4	6.4	1.3	76.4	43.4
91701	1,381	5.1	29.8	8.1	56.9	8.0	6.2	1.0	81.8	15.6
91708	10	0.0	60.0	10.0	30.0	0.0	0.0	0.0	70.0	40.0
91709	3,276	4.7	30.0	23.1	42.2	4.6	5.9	1.4	92.5	9.1
91710	3,161	2.8	64.1	4.7	28.4	13.6	5.7	0.9	81.3	31.3
91729	5	20.0	40.0	0.0	40.0	20.0	0.0	0.0	60.0	20.0
91730	2,577	8.2	43.5	7.0	41.3	9.7	5.9	1.2	77.9	25.9
91737	730	7.9	23.3	8.1	60.7	6.7	5.1	0.5	84.0	14.4
91739	548	4.7	34.1	7.7	53.5	6.6	5.5	0.9	85.9	12.0
91759	16	0.0	18.8	0.0	81.3	12.5	6.3	0.0	100.0	18.8
91761	3,348	6.2	70.4	4.2	19.2	14.0	6.0	1.3	76.9	40.7
91762	3,370	5.1	73.9	3.8	17.3	14.3	5.4	1.2	74.5	50.4
91763	1,827	5.1	74.4	8.3	12.3	13.1	5.7	0.7	79.0	51.5
91764	3,078	6.2	75.9	3.3	14.5	15.1	6.0	1.6	71.8	52.4
91766	73	2.7	61.6	15.1	20.5	6.8	9.6	5.5	84.9	30.1
91784	533	5.1	20.3	9.4	65.3	4.7	6.8	1.1	85.0	8.4
91786	2,321	9.4	46.0	7.7	36.9	11.1	5.6	1.2	74.9	37.9
92242	11	0.0	27.3	0.0	72.7	9.1	0.0	0.0	63.6	81.8
92252	253	2.4	14.2	3.2	80.2	15.8	8.7	2.8	85.0	54.5
92256	98	2.0	15.3	4.1	78.6	11.2	9.2	0.0	77.6	48.0
92277	1,121	8.2	17.6	8.7	65.6	14.5	7.7	1.6	79.6	25.3
92278	769	10.1	19.9	6.6	63.3	13.7	8.2	1.2	82.6	0.8
92284	660	3.0	20.6	4.4	72.0	17.3	9.7	1.5	82.9	55.6

NOTE: ZIP CODES WITH FEWER THAN FIVE BIRTHS ARE NOT SHOWN.  
SOURCE: CALIFORNIA DEPARTMENT OF HEALTH SERVICES, BIRTH FILES.

SAN BERNARDINO COUNTY LIVE BIRTHS 1990-2000

APPENDIX D. SAN BERNARDINO COUNTY RESIDENT LIVE BIRTHS BY SELECTED CHARACTERISTICS AND RESIDENCE ZIP CODE, 1998-2000

MOTHER'S RESIDENCE ZIP CODE	TOTAL BIRTHS	MOTHER'S RACE/ETHNICITY				PERCENT MOTHERS <19 YEARS	LOW BIRTHWEIGHT		PERCENT FIRST TRIMESTER PRENATAL CARE	PERCENT MEDI-CAL FUNDED PRENATAL CARE
		PERCENT BLACK	PERCENT HISPANIC	PERCENT OTHER RACE	PERCENT WHITE		PERCENT <2500 GM	PERCENT <1500 GM		
92285	41	0.0	2.4	2.4	95.1	24.4	4.9	2.4	82.9	82.9
92286	8	12.5	0.0	0.0	87.5	25.0	0.0	0.0	87.5	50.0
92301	1,100	11.4	48.8	3.2	36.6	15.9	7.9	1.0	75.5	51.4
92305	17	0.0	17.6	0.0	82.4	0.0	5.9	5.9	52.9	17.6
92307	1,233	10.1	23.7	3.4	62.8	13.9	6.3	0.9	80.1	46.3
92308	1,127	8.6	26.1	2.8	62.6	17.4	5.8	1.2	78.1	49.2
92309	33	0.0	63.6	3.0	33.3	9.1	6.1	0.0	75.8	66.7
92310	967	16.0	22.0	7.2	54.7	8.3	6.7	2.0	91.9	0.8
92311	1,480	9.5	40.7	6.6	43.2	21.8	6.8	1.2	75.7	50.4
92313	428	5.6	37.4	7.7	49.3	10.5	5.8	1.2	82.9	18.5
92314	245	0.8	18.4	2.9	78.0	12.2	7.3	1.6	82.4	50.6
92315	216	0.5	36.6	1.9	61.1	16.2	8.8	2.3	69.0	62.5
92316	1,365	5.5	76.8	1.4	16.3	17.6	6.1	0.9	74.1	50.0
92317	66	1.5	40.9	1.5	56.1	13.6	9.1	0.0	78.8	40.9
92318	12	0.0	91.7	8.3	0.0	16.7	8.3	0.0	75.0	75.0
92321	53	0.0	43.4	0.0	56.6	17.0	3.8	0.0	69.8	56.6
92322	28	0.0	10.7	0.0	89.3	14.3	10.7	7.1	75.0	25.0
92324	3,150	11.1	66.9	5.9	16.2	16.6	6.9	1.6	72.5	49.6
92325	375	0.5	13.6	4.0	81.9	13.3	5.3	1.1	79.7	40.3
92326	16	6.3	37.5	0.0	56.3	6.3	0.0	0.0	87.5	56.3
92327	26	0.0	23.1	3.8	73.1	11.5	7.7	0.0	84.6	65.4
92329	102	2.0	15.7	5.9	76.5	12.7	5.9	2.9	73.5	36.3
92333	10	0.0	10.0	20.0	70.0	0.0	0.0	0.0	80.0	20.0
92334	21	23.8	47.6	4.8	23.8	19.0	9.5	0.0	76.2	66.7

NOTE: ZIP CODES WITH FEWER THAN FIVE BIRTHS ARE NOT SHOWN.  
SOURCE: CALIFORNIA DEPARTMENT OF HEALTH SERVICES, BIRTH FILES.

SAN BERNARDINO COUNTY LIVE BIRTHS 1990-2000

APPENDIX D. SAN BERNARDINO COUNTY RESIDENT LIVE BIRTHS BY SELECTED CHARACTERISTICS AND RESIDENCE ZIP CODE, 1998-2000

MOTHER'S RESIDENCE ZIP CODE	TOTAL BIRTHS	MOTHER'S RACE/ETHNICITY				PERCENT MOTHERS <19 YEARS	LOW BIRTHWEIGHT		PERCENT FIRST TRIMESTER PRENATAL CARE	PERCENT MEDI-CAL FUNDED PRENATAL CARE
		PERCENT BLACK	PERCENT HISPANIC	PERCENT OTHER RACE	PERCENT WHITE		PERCENT <2500 GM	PERCENT <1500 GM		
92335	5,773	6.6	77.1	2.2	14.1	16.2	6.2	1.3	71.1	56.1
92336	2,686	10.9	60.4	5.7	23.0	12.1	5.5	1.2	77.6	35.7
92337	1,518	10.3	66.5	4.7	18.5	9.5	5.2	0.9	77.9	27.9
92339	30	0.0	20.0	3.3	76.7	16.7	3.3	0.0	86.7	16.7
92340	11	0.0	9.1	18.2	72.7	9.1	18.2	0.0	54.5	27.3
92341	13	0.0	7.7	0.0	92.3	0.0	23.1	7.7	76.9	53.8
92342	104	5.8	28.8	1.9	63.5	11.5	6.7	2.9	85.6	29.8
92345	2,908	4.4	37.0	2.6	56.0	16.5	6.1	1.1	79.5	46.8
92346	2,114	14.2	38.2	6.1	41.5	14.2	6.4	1.3	75.7	41.2
92347	66	0.0	43.9	1.5	54.5	16.7	6.1	1.5	65.2	45.5
92352	173	1.2	12.7	2.3	83.8	9.8	6.9	2.3	85.0	26.6
92354	686	6.6	21.7	30.9	40.8	6.4	5.0	0.6	81.9	27.8
92356	186	1.6	22.6	4.3	71.5	19.4	4.8	0.5	71.5	63.4
92358	26	0.0	15.4	7.7	76.9	11.5	3.8	0.0	69.2	50.0
92359	299	3.7	32.8	4.0	59.5	15.1	3.0	1.3	73.9	36.8
92363	191	1.6	29.3	11.5	57.6	26.7	5.2	1.0	62.8	75.4
92365	80	0.0	20.0	0.0	80.0	15.0	7.5	2.5	65.0	48.8
92368	49	4.1	59.2	0.0	36.7	18.4	2.0	0.0	61.2	63.3
92371	278	1.1	22.3	2.9	73.7	15.1	9.0	1.1	74.8	45.3
92372	113	0.9	20.4	1.8	77.0	16.8	10.6	0.9	77.9	38.1
92373	1,069	5.5	22.4	11.5	60.6	7.8	5.1	1.2	79.9	22.9
92374	1,552	6.6	45.0	5.4	42.9	14.0	6.8	1.4	71.9	37.8
92375	8	0.0	25.0	12.5	62.5	12.5	0.0	0.0	50.0	50.0
92376	4,447	20.3	64.9	3.4	11.5	18.4	7.4	1.5	71.9	54.6

NOTE: ZIP CODES WITH FEWER THAN FIVE BIRTHS ARE NOT SHOWN.  
SOURCE: CALIFORNIA DEPARTMENT OF HEALTH SERVICES, BIRTH FILES.

SAN BERNARDINO COUNTY LIVE BIRTHS 1990-2000

APPENDIX D. SAN BERNARDINO COUNTY RESIDENT LIVE BIRTHS BY SELECTED CHARACTERISTICS AND RESIDENCE ZIP CODE, 1998-2000

MOTHER'S RESIDENCE ZIP CODE	TOTAL BIRTHS	MOTHER'S RACE/ETHNICITY				PERCENT MOTHERS <19 YEARS	LOW BIRTHWEIGHT		PERCENT FIRST TRIMESTER PRENATAL CARE	PERCENT MEDI-CAL FUNDED PRENATAL CARE
		PERCENT BLACK	PERCENT HISPANIC	PERCENT OTHER RACE	PERCENT WHITE		PERCENT <2500 GM	PERCENT <1500 GM		
92377	756	20.1	46.4	3.7	29.8	11.5	5.7	1.5	79.6	20.6
92378	19	10.5	36.8	0.0	52.6	10.5	5.3	5.3	78.9	36.8
92382	164	0.0	11.6	3.7	84.8	8.5	3.0	0.0	78.7	24.4
92385	9	0.0	33.3	0.0	66.7	0.0	0.0	0.0	77.8	55.6
92386	45	2.2	13.3	2.2	82.2	24.4	8.9	4.4	73.3	62.2
92391	79	0.0	27.8	2.5	69.6	13.9	6.3	2.5	81.0	35.4
92392	2,946	10.2	39.3	4.5	46.0	15.8	6.5	1.6	79.6	41.8
92393	9	11.1	44.4	0.0	44.4	0.0	11.1	0.0	77.8	66.7
92394	503	16.7	41.2	4.2	38.0	14.7	6.0	2.2	77.5	39.8
92397	160	0.0	10.0	5.0	85.0	5.6	9.4	3.8	82.5	16.3
92398	59	5.1	11.9	3.4	79.7	15.3	3.4	0.0	55.9	59.3
92399	1,467	0.5	27.5	2.1	69.9	10.1	5.5	1.1	75.3	32.2
92401	187	15.5	69.0	2.1	13.4	21.9	6.4	1.6	67.9	72.2
92402	11	36.4	54.5	0.0	9.1	18.2	9.1	0.0	72.7	63.6
92404	3,055	22.8	47.0	3.9	26.3	17.8	7.4	1.7	74.5	64.4
92405	1,726	16.7	60.1	2.0	21.2	19.3	7.1	1.5	72.0	61.9
92406	12	33.3	50.0	0.0	16.7	8.3	16.7	16.7	83.3	58.3
92407	2,533	13.5	48.4	5.4	32.7	16.7	6.5	1.5	74.8	46.3
92408	783	17.4	52.6	14.8	15.2	17.0	6.9	1.3	69.5	67.4
92410	3,270	15.4	69.0	3.3	12.4	19.9	7.1	1.3	67.9	75.1
92411	1,510	20.7	72.3	1.9	5.0	20.4	8.3	2.0	67.0	72.7
92423	6	0.0	16.7	16.7	66.7	0.0	0.0	0.0	83.3	33.3
92427	6	33.3	0.0	16.7	50.0	0.0	0.0	0.0	83.3	33.3
93562	77	0.0	23.4	5.2	71.4	20.8	6.5	0.0	74.0	66.2

NOTE: ZIP CODES WITH FEWER THAN FIVE BIRTHS ARE NOT SHOWN.  
SOURCE: CALIFORNIA DEPARTMENT OF HEALTH SERVICES, BIRTH FILES.